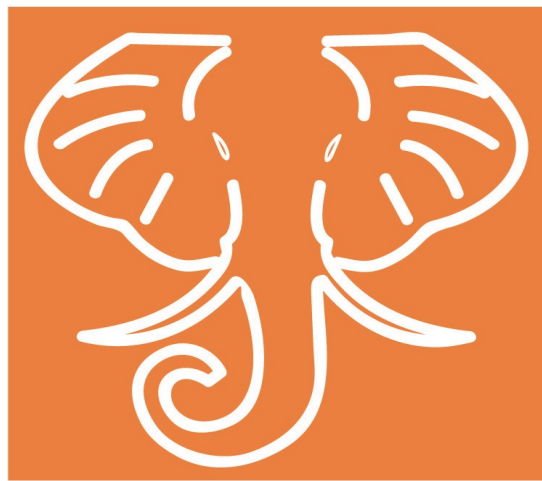


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NUMISMATIC NOTES AND MONOGRAPHS

No. 159

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No. 159

# THE AGRINION HOARD

By MARGARET THOMPSON



THE AMERICAN NUMISMATIC SOCIETY  
NEW YORK

1968



# THE AMERICAN NUMISMATIC SOCIETY

*Founded 1858 · Incorporated 1865*

BROADWAY BETWEEN 155TH & 156TH STREETS

NEW YORK, N.Y. 10032

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*Number 159*





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By MARGARET THOMPSON



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# CATALOGUE OF THE AGRINION HOARD

## INTRODUCTION

This important hoard was found in 1959 at or near Agrinion in western Aetolia and offered to the American Numismatic Society in the following year. A photographic record was made shortly thereafter but the coins themselves were not acquired until the summer of 1962, by which time it had become apparent that the deposit had significant chronological implications and merited full publication.<sup>1</sup>

As reported in a preliminary note in the 1962 *Numismatic Chronicle*,<sup>2</sup> the Agrinion Hoard now consists of 1,340 silver coins:

- 179 autonomous drachms and hemidrachms of various mints in the Peloponnese and Central Greece
- 39 tetradrachms of Athens
- 1 tetradrachm of Cyme
- 151 hemidrachms of Megalopolis
- 834 hemidrachms of the Achaean League
- 97 hemidrachms of Aetolia
- 39 denarii of the Roman Republic

<sup>1</sup> This study has been greatly facilitated by the assistance and cooperation of a number of colleagues, to whom I am deeply grateful. A preliminary photographic record of the hoard was made by George C. Miles and the late William P. Wallace. The onerous task of cleaning the coins was undertaken by Persy Coronis; the subsequent photography for the plates is the work of Peter Berghaus. Margildis Schlüter provided prints of a large Achaean League hoard found at Olympia, which she is publishing, and has been most generous in sharing her information and tentative conclusions. When she first suggested the possibility of common mints and a second century beginning for the Achaean coinage, I was somewhat skeptical but study of the Agrinion material has convinced me that she is right. Rudi Thomsen and Michael Crawford have devoted a great deal of time to analyzing the Roman material and preparing the Appendix, and Charles Hersh has supplied helpful data on the Roman series as a whole. The publication in its final form owes much to the careful checking of Joan E. Fisher.

<sup>2</sup> "Athens Again," *NC* 1962, 320-322.



To this record should be added one tetradrachm of Cyme, which was disposed of at the time the hoard was uncovered, and seven fractions, four hemidrachms of the Achaean League and three drachms of Chalcis, which were sold before the ANS obtained the material.

In view of the controversial chronology of several coinages represented in the hoard, it will be well to emphasize at the start that we are dealing with a deposit which has not been adulterated in modern times. A green copper encrustation was present on numerous specimens of all series listed above, even on the single tetradrachm of Cyme, and many pieces were also heavily coated with a distinctive dark accretion.<sup>3</sup> Beyond any question the coins are from a single burial.

Adulteration in antiquity is a possibility which cannot be ruled out, but there is no cogent reason for supposing that it took place. In its basic composition the Agrinion Hoard is comparable with other deposits in which autonomous issues of the fourth and third centuries are combined with second century strikings of Megalopolis, Aetolia and the Achaean League.<sup>4</sup> It differs from the other hoards in containing tetradrachms of Athens and Cyme and denarii of the Roman Republic.<sup>5</sup> This admixture of coinages is, however, entirely plausible in the light of the Aetolian provenance of the hoard. The Athenian and Cymeian material is contemporary with the bulk of the Federal money and the chronological problems presented by the denarii do not seem serious enough to necessitate the segregation of the 39 Roman coins and the assumption that they were added at a later date to the 1301 Greek coins of an earlier hoard.

In the catalogue which follows, the arrangement is roughly chronological: the early series and the miscellaneous coinages of second

<sup>3</sup> According to Hansjörg Bloesch, who saw the coins before they were cleaned, this is sulphuric oxide with limestone encrustation. In order to preserve the record of the two types of deposit, a small group of coins has been left uncleaned as noted in the catalogue.

<sup>4</sup> The Caserta, Western Greece, Arcadia and Olympia Hoards cited on page 4 and throughout the publication.

<sup>5</sup> The Abruzzi Hoard (NC 1962, 312-313) apparently contained Athenian tetradrachms and denarii associated with Achaean League hemidrachms but the circumstances of its accumulation are so obscure that it cannot be considered a reliable parallel for the Agrinion Hoard.

century date preceding the large issues of Megalopolis, the Achaean League and Aetolia, which comprise the bulk of the hoard. The denarii and their special problems are treated in an appendix. It has seemed worthwhile to divide the Achaean money into early and late groupings in an effort to show when the various cities were active and the extent and character of the coinage at different periods. This distribution of issues involves a degree of confusion, especially in the case of cities represented by autonomous striking as well as by early and late Federal emissions. The geographical and alphabetical listing on page 5 summarizes the contents of the hoard for more convenient reference.

The entries of the catalogue are by obverse and reverse dies within each issue, with transfers within and between issues noted. Die axes have been given throughout but they establish little more than the lack of adjustment at most mints. The tetradrachms of Athens and those of Cyme, as we know from other evidence, show a consistent relationship of dies ( $\uparrow \uparrow$ ) and several issues of Chalcis in the present hoard have a uniformly horizontal adjustment ( $\uparrow \leftarrow$ ). For all other mints providing sufficient material for evaluation, the positions are erratic ( $\uparrow, \downarrow, \leftarrow, \rightarrow$ ).<sup>6</sup>

Since the Agrinion coins will some day be useful for die studies of individual mints, a record of practically all obverse and reverse dies is to be found on the plates.<sup>7</sup> In the case of several examples of the same pair of dies, the illustrated coin is the one listed first, unless otherwise indicated.

Throughout the publication there is frequent reference to the studies of Clerk and Weil and to four hoards, comparable in date and composition to that of Agrinion. The bibliography is as follows:

Clerk—M. G. Clerk, *Catalogue of the Coins of the Achaean League*, London, 1895.

Weil—R. Weil, "Das Münzwesen des Achäischen Bundes," *ZfN* 1882, 199–272.

<sup>6</sup> Minor deviations from these positions have not been recorded. Even coinages with adjusted dies show variations resulting from different points of alignment. See W. P. Wallace, *The Euboian League and its Coinage*, *NNM* 134 (New York, 1956), 89–90 and G. Le Rider, *Suse sous les Séleucides et les Parthes* (Paris, 1965), 20–21.

<sup>7</sup> The few omissions, due to exigencies of space, are noted in the catalogue.

- Caserta Hoard—A. Löbbecke, "Ein Fund achäischer Bundesmünzen," *ZfN* 1908, 275–303.
- Arcadia Hoard—M. Crosby and E. Grace, *An Achaean League Hoard*, *NNM* 74, 1936.
- Western Greece Hoard—M. Thompson, "A Hoard of Greek Federal Silver," *Hesperia* 1939, 116–154.
- Olympia Hoard—This is an unpublished hoard now being studied by Margildis Schlüter who has made photographs of the coins available. Another Olympia Hoard, published by Newell in *Numismatic Notes and Monographs* 39, is also mentioned in the commentary on the Agrinion Hoard. To avoid confusion this earlier find is referred to as the Olympia 1922 Hoard.

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## THE COINS

### SICYON

(50 coins)

*Obv.*: Σ I Chimaera l.

*Rev.*: Dove flying l.; usually some marking in field.

*Hemidrachms*

#### *No marking*

- |                           |                                |
|---------------------------|--------------------------------|
| 1. Σ E on obverse. 2.49 → | 7. 2.57 ↓                      |
| 2. 2.33 ↗                 | 8. 2.59 ↑                      |
| 3. 2.53 ↑; 2.53 ↘         | 9. Obverse letters uncertain.  |
| 4. 2.54 ↑; 2.46 ↓         | 2.53 ↑                         |
| 5. 2.56 ←                 | 10. Obverse letters uncertain. |
| 6. 2.49 ↓                 | 2.61 ↗                         |

#### *NO upper r.*

- |                                    |                                    |
|------------------------------------|------------------------------------|
| 11. 2.64 →                         | 15. 2.59 →                         |
| 12. 2.43 ↓                         | 16. Same reverse die as 15. 2.63 ↑ |
| 13. 2.56 ←                         | 17. 2.62 ↘                         |
| 14. Same reverse die as 13. 2.52 ← |                                    |

#### *Dot upper r.*

- |                                    |            |
|------------------------------------|------------|
| 18. Obverse letters uncertain.     | 23. 2.70 ↓ |
| 2.46 ↘                             | 24. 2.69 ↓ |
| 19. 2.61 ←                         | 25. 2.45 ↓ |
| 20. 2.52 ←                         | 26. 2.51 ↓ |
| 21. Same reverse die as 20. 2.70 ↓ | 27. 2.61 ↗ |
| 22. 2.61 ↑                         | 28. 2.54 ↘ |

#### *Dot upper and lower r.*

29. 2.80 ←

#### *Two dots upper, one dot lower r.*

- |            |            |
|------------|------------|
| 30. 2.73 ↑ | 31. 2.57 ↘ |
|------------|------------|

*Three dots upper r.*

- |            |            |
|------------|------------|
| 32. 2.63 ↑ | 35. 2.61 ↑ |
| 33. 2.73 ↑ | 36. 2.64 ↑ |
| 34. 2.49 ↑ |            |

*l upper r.*

37. 2.49 ↖

*l lower l.*

- |                           |                                  |
|---------------------------|----------------------------------|
| 38. 13 on obverse. 2.68 ↓ | 40. Graffito (K) upper r. 2.64 ↑ |
| 39. 2.76 ↑                |                                  |

*Uncertain*

- |            |                                |
|------------|--------------------------------|
| 41. 2.53 → | 46. 2.42 ←                     |
| 42. 2.60 ↓ | 47. Obverse letters uncertain. |
| 43. 2.51 → | 2.51 ↖                         |
| 44. 2.52 ← | 48. Obverse letters uncertain. |
| 45. 2.42 ↓ | 2.46 ↓                         |

ARGOS

(10 coins)

*Obv.:* Forepart of wolf l.

*Rev.:* A in shallow incuse square; letters and symbols in field.

*Hemidrachms*

- |   |   |
|---|---|
| 49 a. A P above, crescent below. 2.44 ↓         | 54. Π P above, dolphin and club below. 2.37 ↑             |
| b. A[P] above, crescent below. 2.36 ↑           | 55. ☉ above wolf. Δ E above, eagle on harpa below. 2.32 ↑ |
| 50. A P above, club below. 2.59 ↗               | 56. ☉ above wolf.   |
| 51. N l above, crescent below. 2.39 ↗           | a. Δ E above, eagle on harpa below. 2.30 ↓                |
| 52. N l above, grapes r., club below. 2.49 ↑    | b. Δ E above, eagle on harpa below. 2.25 ↑                |
| 53. 3 above wolf. Π P above, club below. 2.44 ↑ |   |

## CHALCIS

(69 coins)

*Obv.*: Female head l.*Rev.*: XAA Eagle flying l., holding serpent; symbol in field.*Drachms**Torch above*

57. 3.33 ↓

58. 3.46 →

*Bucranium below*

59. Eagle r. 3.25 ←

*Rose below*

60. Same obverse die as 59. 3.41 ← 63. 3.42 ↓

61 a. 3.27 →

64. 3.19 ↑

b. 3.52 →

65. 3.38 ↑

62. Same reverse die as 61 b. 66. 3.28 ↑

3.41 →

*Obv.*: Female head r.*Rev.*: XAA Eagle flying r., holding serpent; symbol or monogram in field.*Drachms**Crescent r.*

67 a. 3.36 ←

68. 3.42 ↑

b. 3.18 ←

*Cantharus below*

69. 3.29 ←

72. 3.28 ←

70. Same reverse die as 69. 3.28 → 73. 3.37 ←

71. Same reverse die as 69-70. 74. 3.39 ←

3.27 ←

*Grain-ear below*

75. 3.29 ←

*Lyre below*

76. 3.13 ↓

*Wreath below*

77. 3.25 ←

79. 3.31 ←

78. 3.37 ←

*Trident below*

80. 3.35 ←

*Caduceus below*

81. 3.09 ←

85. 3.28 ←

82. 3.35 ←

86. 3.34 ←

83. 3.27 ←

87. 3.33 ↓

84. 3.36 ←

88. 3.26 ←

⌘ *above*

89. 3.30 ←; 3.35 ←

94. 3.17 ←

90 a. 3.24 ←

95. 3.26 ←

b. 3.40 ←

96. 3.24 ←

91. 3.25 ←

97. 3.45 ←

92. 3.35 ←

98. 3.20 ←

93. 3.09 ←

99. 3.23 ←

*Trophy below*

100. 3.21 ←

105. Same reverse die as 104 b.

101. 3.26 ←

3.24 ←

102 a. 3.56 ←

106. 3.33 ←

b. 3.31 ←

107. 3.40 ←

103. Same reverse die as 102 b.

108. 3.39 ←

3.38 ←; 3.27 ←

109. Same reverse die as 108.

104 a. 3.33 ←

3.46 ←

b. 3.45 ←

110. 3.32 ←

111. 3.23 ←



*Uncertain*

112. 3.33 ←; 3.26 ←

115. 3.31 ←

113. 3.25 ←

116. 3.16 ←

114. 3.34 ↓

117. 3.25 ←

## HISTIAEA

(6 coins)

*Obv.*: Head of Maenad r.*Rev.*: ΙΣΤΙ Bull walking r.; behind, vine with two bunches of grapes; symbol or monogram in field.*Drachms*

118. Grapes r. 3.15 →

122 a. Same reverse die as 121.

119. Grapes r. 3.31 ↓

3.19 ↑

120. Grapes r. 3.17 ↓

b. Α r. 3.32 ↑

121. Α r. 3.23 ↑

## BOEOTIA

(11 coins)

*Obv.*: Boeotian shield.*Rev.*: Α Ω Amphora in incuse square.<sup>8</sup>*Hemidrachm*

123. 2.57

*Obv.*: Boeotian shield*Rev.*: Β Ο Ω Cantharus; above, club.

All in shallow incuse square.

*Hemidrachms*

124. 2.42

127. Legend illegible. 2.41

125. 2.53

128. Β Ο Ι Grapes r. 2.49

126. 2.19

129. Β Ο Ι Grapes r. 2.47

<sup>8</sup> Babelon (*Traité* II.3, 275–276) regards the Α Ω as a mint designation and suggests that the issue was struck by Larymna-Lorymna. Newell in the Olympia 1922 Hoard (*NNM* 39, 18–19) discusses an analogous striking with Δ Ι and follows Head and Imhoof-Blumer in interpreting the letters as a magistrate's initials.

*Rev.*: BO Ω Cantharus; above, fulmen.

*Hemidrachms*

130. 2.38

132. 1.90

131. 2.44

133. 2.47

PHOCIS

(1 coin)

*Obv.*: Bull's head facing.

*Rev.*: Legend illegible. Female head r.  
within incuse square.

*Hemidrachm*

134. 2.51 ↓

LOCRI OPUNTII

(17 coins)

*Obv.*: Head of Persephone r.

*Rev.*: ΟΠΟΝΤΙΩΝ Fighting Ajax r.

*Hemidrachms*

*Serpent in shield*

135. Helmet between legs. 2.45 ↓

138. Spear below. 2.34 ↑

136. Helmet between legs. 2.57 ↓

139. Cantharus between legs.

137 a. Spear (?) below. 2.31 ←

2.39 ↑

b. Illegible. 2.36 ↓

140. Wreath (?) between legs.  
2.27 ↑

*Uncertain symbol in shield*

141. Head l. Spear below. 2.40 ↑

142. Head l. Λ Y and spear below.  
2.56 ↓

*Lion in shield*

143. Helmet crest between legs.  
2.39 ←

144. Helmet crest between legs.  
2.33 ←

*Sea-horse in shield*

145. Spear below. 2.81 ↑

*Rev.*: ΛΟΚΡΩΝ Fighting Ajax r.; fulmen in shield; ὦν  
between legs.

*Hemidrachms*

146 2.36 →

148. Trophy r. 2.44 ↑

147. 2.51 ↑

*Obv.*: Head of Athena r., wearing crested Corinthian  
helmet.

*Rev.*: ΛΟΚΡΩΝ Fighting Ajax r.; sea-horse in shield;  
trident r.

*Hemidrachms*

149. 2.45 ↓; 2.53 ↑

## AENIANES

(2 coins)

*Obv.*: Laureate head of Zeus l.*Rev.*: ΑΙΝΙΑΝΩΝ Warrior hurling javelin r.*Hemidrachms*

150. 2.43 ↑

151. 2.35 ↓

## LAMIA

(4 coins)

*Obv.*: Head of young Dionysus l., wearing ivy wreath.*Rev.*: ΛΑΜΙΕΩΝ Amphora; above, ivy leaf; to r., prochous.*Hemidrachms*

152. 2.55 ↑

154. 2.44 ↑

153. 2.42 ↑

155. 2.43 ↑

OETA

(1 coin)

*Obv.*: Head of lion l.; in mouth, spear-head.

*Rev.*: [OITΑΩΝ] Herakles facing, holding club.

*Hemidrachm*

156. 2.35 ↑

THESSALIAN LEAGUE

(1 coin)

*Obv.*: ΓΑΥΛ behind laureate head of Zeus r.

*Rev.*: ΘΕΣΣΑ [ΛΩΝ] Athena Itonia fighting r.; to l. and

r., ΠΟΛΥ

*Hemidrachm*

157. 1.91 ←

BOEOTIAN LEAGUE

(4 coins)

*Obv.*: Laureate head of Poseidon r. Border of dots.

*Rev.*: ΒΟΙΩΤΩΝ Nike standing l. with wreath and trident;  
monogram or symbol in field.

*Drachms*

158. No dots visible. To l., ⌘ 160 a. Nike probably holds spear.  
4.85 ↓ To l., trident. 4.77 →

159. To l., cornucopiae (?). 4.58 → b. Nike holds spear. To l.,  
trident. 4.82 ↓

AEGINA

(1 coin)

*Obv.*: Tortoise.

*Rev.*: Incuse square divided into five compartments; in  
one section, two globules.












*Drachm*

161. 5.22 ↑





## ATHENS

(39 coins)

*Obv.*: Head of Athena Parthenos r. Border of dots.*Rev.*: A Θ E Owl r. on amphora; various monograms or names, symbols, amphora letters and control combinations. All within wreath of olive.*Tetradrachms*

162. 	Rudder. 16.76 ↑ T. 28 (new reverse) <sup>9</sup>	190/89 B.C.
163. 	Nike; star above owl. 16.70 ↑ T. Not (new obverse and reverse)	189/8
164. 	Trophy. 16.32 ↑ T. 41 (new reverse)	188/7
165. 	Trophy. 16.61 ↑ T. 44 (new reverse)	
166. 	Grain-ear. 16.69 ↑ T. 55 (new reverse)	187/6
167. 	Cicada; H on amphora. <sup>10</sup> 16.73 ↑ T. 71a	185/4
168. <sup>11</sup> 	Serpents; K on amphora. 16.45 ↑ T. 83d	184/3
169. 	Serpents; N on amphora. 16.64 ↑ T. 84 (new reverse)	
170. 	Herm; Γ on amphora. 16.66 ↑ T. 88 (new reverse)	183/2
171. ΠΟΛΥ-ΤΙΝ 	Palm behind owl; ? on amphora; H l. field. Uncleaned. 16.36 ↑ T. 106d	181/0
172. ΠΟΛΥ-ΤΙΝ 	Palm behind owl; ΜΕ on amphora; ΜΡ l. field. <sup>12</sup> 16.76 ↑ T. 110a	





<sup>9</sup> References are to M. Thompson, *The New Style Silver Coinage of Athens*, NS 10 (New York, 1961).<sup>10</sup> This better-preserved example of Thompson 71a resolves the uncertainty as to the amphora letter.<sup>11</sup> Not illustrated.<sup>12</sup> The marking in the left field presents a problem. On the specimens of the Athens corpus (No. 110) it was read as Μ and interpreted as a month letter but this must now be corrected from the evidence of the Agrinion coin, which shows a loop to the right of the Μ. Until we have a reverse on which the amphora lettering is clearer than it is on any recorded specimen, it will be well to reserve judgment on the meaning of the combination of markings.

173. AMMΩ-ΔΙΟ Cornucopiae; ΠΡ l. field. 16.59 ↑ T. 114  
(new reverse) 180/79
174. AMMΩ-ΔΙΟ Cornucopiae; ΜΗ l. field. 16.30 ↑ T. 114Xb
- 175 a. AMMΩ-ΔΙΟ Cornucopiae; ΠΡ l. field. 16.70 ↑ T. 117  
(new reverse)
- b. AMMΩ-ΔΙΟ Cornucopiae; ΕΥ l. field. 16.68 ↑ T. 117  
(new reverse)
176. AMMΩ-ΔΙΟ Cornucopiae; ΕΥ l. field. 16.47 ↑ T. 118  
(new reverse)
177. XAPI-HPA Cock; marking uncertain. 16.55 ↑ T. 130  
(new reverse)<sup>13</sup> 178/7
178. XAPI-HPA Cock; ΠΡ l. field. 16.25 ↑ T. 131d
179. XAPI-HPA Cock; ΠΡ l. field. 16.41 ↑ T. 132a
180. XAPI-HPA Cock; ΣΩ<sup>14</sup> below. 16.73 ↑ T. 134 (new reverse)
181. -ΛΥΣΙΑ Forepart of horse; Ζ on amphora; ΣΦ  
below. 16.63 ↑ T. 167h 177/6
182. -ΛΥΣΙΑ Forepart of horse; ? on amphora; ΑΡ l.  
field. 16.79 ↑ T. 169 (new reverse)
- 183 a.  Filleted thyrsos; ? on amphora; ΜΕ  
below. 16.76 ↑ T. 177 (new reverse) 176/5
- b.  Filleted thyrsos; ? on amphora; ΕΥ  
below. 16.59 ↑ T. 177d
184. ΔΗΜΗ-ΙΕΡΩ Helmet; Α on amphora; ΜΗ/ΘΥ<sup>15</sup> below.  
16.70 ↑ T. 202d 174/3

<sup>13</sup> Doublestriking makes identification of the obverse die difficult. It seems to be T. 130.

<sup>14</sup> This new reverse provides a new control combination for the issue, one which is found in the contiguous emission of Adei-Helio.

<sup>15</sup> A coin from the Meletopoulos Collection (*Athens* 202d) probably has the same recutting of the control combination. Its reverse is not clear.

185. ΔΗΜΗ-ΙΕΡΩ Helmet; A on amphora; ΘΕ<sup>16</sup> below.  
16.68 ↑ T. 206 (new reverse)
186.  Eagle; A on amphora; ΕΥ below. 16.62 ↑  
T. 228c 173/2
187.  Eagle; H on amphora; ΣΦ below. 16.57 ↑  
T. 236 (new reverse)
188.  Aplustre; ? on amphora; ? below. 16.54 ↑  
T. 257b 172/1
189.  Aplustre; K on amphora; ΠΡ below.  
16.22 ↑ T. 258a
190. ΚΤΗΣΙ-ΕΥΜΑ Nike; H on amphora; ΕΝ below. Un-  
cleaned. 16.71 ↑ T. 271 (new reverse) 171/0
- 191 a. ΚΤΗΣΙ- Nike; M on amphora; ΠΡ below. 16.49 ↑  
ΕΥΜΑ T. 277 (new reverse)
- b. ΚΤΗΣΙ- Nike; M on amphora; ΠΡ l. field. 16.56 ↑  
ΕΥΜΑ T. 277 (reverse of 278h)
192. ΚΤΗΣΙ-ΕΥΜΑ Nike; ? on amphora; ΜΕ l. field. 16.76 ↑  
T. Not (reverse of 277k)
193. ΚΤΗΣΙ-ΕΥΜΑ Nike; ? on amphora; ΕΝ below. 16.60 ↑  
T. 281
194. ΓΛΑΥ-ΕΧΕ Helios bust; ? on amphora; ΗΡ l. field.  
16.73 ↑ T. 300 (new reverse) 170/69
195. ΜΙΚΙ- Nike in quadriga; Ε/Δ (?) on amphora;  
ΘΕΟΦΡΑ ΜΕ/ΑΡ below. 16.69 ↑ T. 318c 169/8
196. ΠΟΛΥΧΡΑΜ-ΝΙΚΟΓ-ΘΕΜΙΣΤΟΚΛΗ Caduceus; Ι on  
amphora; ΔΙ below. 16.80 ↑ T. Not  
(reverse of 378f) 165/4
197. ΘΕΟΦΡΑ-ΣΩΤΑΣ-ΠΕΙΣΩΝ Fulmen; Δ on amphora;  
ΜΕ below. Uncleaned. 16.79 ↑ T. 407  
(new reverse) 162/1

<sup>16</sup> The new reverse die adds still another control combination to the thirteen already listed for this issue and confirms Svoronos' record of the combination (see *Athens*, p. 86).

CYME  
(1 coin)

*Obv.*: Head of Amazon Cyme r.

*Rev.*: KYMAION Horse r.; below, cup. All within wreath of laurel.

*Tetradrachm*

198. ΜΗΤΡΟΦΑΝΗΣ in exergue. Uncleaned. 16.14 ↑

MEGALOPOLIS  
(151 coins)

*Obv.*: Laureate head of Zeus l.

*Rev.*: ⚶ Pan seated l. on rocks, holding lagobolon.

*Hemidrachms*

1 on obverse; 1 on reverse

199. 2.76 ↑

Δ on reverse

200. 2.74 ↓

201. 2.54 ←

*Obv.*: Laureate head of Zeus l.

*Rev.*: Pan seated l. on rocks, holding lagobolon; eagle on his knee.

*Hemidrachms*

⚶ Π on reverse

202. 2.43 →

K Α on reverse

203 a. 2.41 ←

b. 2.46 ←

•



## Agrinion Hoard

***P Δ on reverse***

204. a. 3.13  $\uparrow$ ; 2.19 (broken)  $\downarrow$   
b. 2.36  $\leftarrow$
205. a. Same reverse die as 204 b.  
2.39  $\downarrow$ ; 2.43  $\uparrow$ ; 2.27  $\uparrow$   
b. 2.41  $\leftarrow$   
c. 2.58  $\downarrow$

$\Delta$  on reverse

- 206 a. 2.33  $\leftarrow$ ; 2.30  $\leftarrow$   
b. 2.49  $\leftarrow$   
c. 2.27  $\uparrow$
- 207 a. 2.37  $\downarrow$ ; 2.28  $\leftarrow$   
b. 2.37  $\downarrow$   
c. 2.33  $\rightarrow$   
d. 2.34  $\downarrow$   
e. 2.34  $\uparrow$   
f. 2.34  $\uparrow$
- 208 a. Same reverse die as 207f.  
2.45  $\uparrow$   
b. 2.36  $\rightarrow$ ; 2.36  $\uparrow$   
c. 2.29  $\downarrow$ ; 2.36  $\rightarrow$ ; 2.41  $\downarrow$   
d. 2.33  $\leftarrow$   
e. 2.31  $\downarrow$   
f. 2.33  $\leftarrow$
- 209 a. 2.23  $\uparrow$   
b. 2.26  $\uparrow$   
c. 2.30  $\downarrow$   
d. 2.38  $\downarrow$   
e. 2.46  $\uparrow$
- 210 a. 2.25  $\leftarrow$ ; 2.29  $\downarrow$   
b. 2.28  $\downarrow$
211. 2.32  $\downarrow$   
212. 2.22  $\rightarrow$   
213 a. Same reverse die as 212.  
2.27  $\leftarrow$   
b. 2.26  $\uparrow$   
c. 2.36  $\leftarrow$   
d. 2.29  $\rightarrow$   
e. 2.26  $\leftarrow$   
f. 2.27  $\uparrow$   
g. 2.44  $\rightarrow$   
h. 2.20  $\uparrow$ ; 2.24  $\rightarrow$   
i. 2.32  $\downarrow$
214. 2.26  $\leftarrow$   
215. 2.24  $\uparrow$   
216 a. 2.23  $\leftarrow$   
b. 2.28  $\downarrow$   
c. 2.28  $\downarrow$   
d. 2.38  $\uparrow$  (PLATE XIX)
- 217 a. 2.35  $\rightarrow$   
b. 2.36  $\rightarrow$
- 218 a. 2.44  $\downarrow$   
b. 2.42  $\rightarrow$ ; 2.43  $\rightarrow$

$\Delta$   $\Delta$  on reverse

219. Same obverse die as 218.<sup>17</sup> 220 a. 2.35 ↓; 2.45 ↓  
2.26 ↑ b. 2.33 ↑

*Æ Δ on reverse*

- |   |  |
|---|--|
| 221. Same obverse die as 214. <sup>17</sup><br>2.27 ↑   | b. Same reverse die as 222 d.<br>2.35 ←  |
| 222. Same obverse die as 215. <sup>17</sup><br>a. 2.27 ↑<br>b. 2.36 →<br>c. 2.29 →<br>d. 2.33 ↑; 2.18 →<br>e. 2.26 ↑<br>f. 2.29 ↑ (PLATE XIX) | c. 2.37 ← (PLATE XIX)<br>d. 2.39 ←<br>224. Same reverse die as 223 d.<br>2.23 ↓; 2.20 ↓<br>225. Same reverse die as 223 d<br>and 224. 2.29 ←<br>226. Same reverse die as 223 d,<br>224, 225. 2.32 ←; 2.31 →<br>(PLATE XIX) |
| 223. Same obverse as 216. <sup>17</sup><br>a. Same reverse die as 222 c.<br>2.28 ←  |  |

*A Δ on reverse*


- |  |   |
|--|---|
| 227. 2.29 ↓  | h. 2.29 ←   |
| 228 a. 2.39 →<br>b. 2.34 ↑   | i. 2.30 ↓<br>j. 2.25 ← (PLATE XIX); 2.26 ↑  |
| 229 a. 2.24 ↓<br>b. 2.26 ↑<br>c. 2.45 ↑  | 231 a. 2.37 →<br>b. 2.39 ↑; 2.28 ↑<br>c. 2.27 ↓<br>d. 2.40 →<br>e. 2.29 ↓<br>f. 2.34 ↓<br>g. 2.34 ↓; 2.26 → |
| 230. Same obverse die as 226. <sup>17</sup><br>a. Same reverse die as 229 c.<br>2.31 ↑<br>b. 2.28 ←<br>c. 2.40 →; 2.32 ↑<br>d. 2.31 ↑; 2.38 →<br>e. 2.32 ←<br>f. 2.29 →<br>g. 2.37 ↓ | 232 a. Same reverse die as 231 g.<br>2.27 ↑<br>b. 2.23 ↓<br>c. 2.28 →                                       |

<sup>17</sup> Die linkage between Nos. 218–219 is illustrated on PLATE XVII; the coins of the four other instances of transferred dies are grouped at the bottom of PLATE XIX for convenient comparison.



The location of the breaks on the later specimens is as follows: on No. 219 small flaws by the nose, the termination of the wreath, and the long lock of hair behind the neck line; on No. 222 around the nose; on No. 223 around the crown of the head; on No. 230 before the face.

2\*

- ACHAEAN LEAGUE (EARLY)<sup>18</sup>  
(576 coins)

*Rev.*:  with various markings in field; all in laurel wreath tied below.

**Corinth**      6 coins (part)

240 a.  below. 2.39 ←; 2.23 → 241 a. Wreath tied above. 2.35 ↑  
b. 2.43 ↑ (PLATE XLVII)  
b.  below. 2.44 →  
242. Wreath tied above. 2.35 ↑

<sup>18</sup> The reader is reminded that the Achaean League coinage has been divided into early and late groupings (see p. 3 *supra*); the notation "(part)" after the record of coinage for a given mint means that there are issues in another section of the catalogue. The tabulation on p. 5 gives exact locations.

In the commentaries on the various mints the record of known coins and obverse dies for the issues of the Agrinion Hoard is supplemented by other material. This is by no means an exhaustive compilation. It includes illustrations in readily-available publications and sale catalogues, photographs of part of the Olympia Hoard, and the Messenian and Megalopolitan hemidrachms of the Paris, London, Cambridge, Berlin and Leningrad Cabinets. Photographs and casts of the coins of the two cities were collected by James Dengate for a study of the money of Megalopolis (*ANSMN* 13 [1967], 57-110) and were thus at hand for die comparisons.

**Sicyon** 17 coins (part)

EY to l. and r.; ΣΙ below  
(all wreaths tied above)

- |   |  |
|---|--|
| 243. 2.30 →   | 246 a. 2.45 ↑                              |
| 244 a. Same reverse die as 243.<br>2.39 ↑ (PLATE XLVII) | b. Same reverse die as 245 b.<br>2.42 ↑    |
| b. 2.38 ↑   | 247 a. 2.44 ↑; 2.42 ↑                      |
| 245 a. Same reverse die as 243,<br>244 a. 2.26 ↓        | b. 2.45 →                                  |
| b. 2.38 ←   | 248 a. 2.40 ←                              |
| c. 2.44 ←   | b. 2.40 ←                                  |
| d. EY above; ΣΙ below. 2.44 →                           | 249. Σ Ι to l. and r.; EY below.<br>2.36 ← |
| e. Σ Ι to l. and r.; EY below.                          | 250. 2.41 ↓                                |
| Uncleaned. 2.45 ↑                                       |  |

Corinth and Sicyon each produced a single issue during the early period of the Achaean League coinage.<sup>19</sup> Neither seems to have been a large emission. More than three times as many obverse dies have survived from the Sicyonian striking as from that of Corinth, but our record is very likely incomplete for both mints.<sup>20</sup>

<i>Agrinion Hoard</i>		<i>Other</i>	
Coins	Obverse dies	Coins	New obverse dies
9- <del>AP</del> 6	3	8	—
EY-ΣΙ 17	8	24	2

<sup>19</sup> As is the case at other mints, insignificant variations occur within the issues, notably in the form of the Corinthian monogram and the arrangement of the Sicyonian letters.

<sup>20</sup> Evaluations throughout of the degree of completeness of our record of obverse dies and hence of the size of individual coinages are based on the statistical survey of Francis Marriott (discussed in *Athens*, 711). The operative premise is that an average of six or more coins per obverse die per issue indicates that very few dies are unknown while lower ratios imply that there were originally more dies than we now know.

**Patras** 124 coins (part)

↗ to r.; trident to l. below  
(all wreaths tied above)

- |                               |                                 |
|-------------------------------|---------------------------------|
| 251. 2.34 ↑                   | 257. ⚡ to l. 2.42 →             |
| 252 a. 2.38 ↑                 | 258. Same reverse die as 257.   |
| b. 2.19 →                     | 2.33 ↑                          |
| 253. 2.43 ↑                   | 259 a. Same reverse die as 257, |
| 254. 2.37 →                   | 258. 2.46 ↑                     |
| 255 a. 2.40 ←                 | b. ↘ to r. 2.37 ↑               |
| b. 2.38 ← (PLATE XLVII)       | 260 a. ↘ to r. 2.45 →           |
| 256. Monogram above. Probably | b. 2.44 →                       |
| same reverse die as 252 b.    |                                 |
| 2.22 ↑                        |                                 |

E Y to l. and r.; trident to r. below

- |                                   |                               |
|-----------------------------------|-------------------------------|
| 261. Same obverse die as 259.     | 264 a. ⊐ to l. 2.40 ↓         |
| a. 2.41 →                         | b. Same reverse die as 261 b. |
| b. Trident above. 2.35 →          | 2.37 ↓                        |
| 262. Same obverse die as 260.     | c. 2.37 ↑                     |
| a. 2.37 ↑                         | 265. 1.95 →                   |
| b. 2.44 ←                         | 266. Same reverse die as 265. |
| 263 a. Same reverse die as 262 a. | 2.13 ↑                        |
| 2.39 ←                            | 267. ⊐ to l. 2.40 ↑           |
| b. Trident above. 2.42 →          | 268. ⊐ to l. 2.42 ←           |
| c. Trident above. 2.37 →          | 269. Same reverse die as 268. |
| d. 2.39 ↓                         | 2.37 ←                        |

⚡ to l.; N to r.; trident to r. below

- |                         |  |
|-------------------------|--|
| 270 a. 2.39 ↑           | 271. Over Ambracia? <sup>21</sup> 2.40 → |
| b. 2.41 ↑ (PLATE XLVII) |  |

<sup>21</sup> The undertype is very similar in size and shape to the obelisk on Victoriate of Ambracia (as *BMCThess.*, pl. XVIII, 1) of the late third and early second century. Official clipping might account for the reduced flan and lighter weight of the Agrinion coin.

The monograms on the reverse are uncertain due to the overstriking. A well-preserved coin from the Arcadia Hoard (*NNM* 74, No. 11) is from the same obverse die as No. 271 and has the reverse lettering of our 270.

$\mathbf{M}$  above;  $\Delta$  l to l. and r.; trident to r. below

- 272 a. 2.40  $\rightarrow$  c. 2.38  $\rightarrow$   
 b. 2.38  $\uparrow$  d. 2.27  $\rightarrow$ ; 2.39  $\leftarrow$   
 273 a. Same reverse die as 272 a. 275. a. 2.33  $\rightarrow$   
 2.41  $\downarrow$  (PLATE XLVII) b. Same reverse die as 272 b,  
 b. Same reverse die as 272 b. 273b. 2.22  $\uparrow$   
 2.35  $\rightarrow$  c. Same reverse die as 274 c.  
 c. 2.42  $\leftarrow$  2.28  $\uparrow$ ; 2.29  $\uparrow$   
 d. 2.28  $\leftarrow$  276. 2.24  $\leftarrow$   
 e. 2.42  $\downarrow$  277. Same reverse die as 276.  
 274 a. 2.36  $\rightarrow$  2.44  $\rightarrow$   
 b. Same reverse die as 273 c.  
 2.32  $\uparrow$

$\Delta$  l to l. and r.; trident to r. below

278. 2.35  $\downarrow$  d. 2.28  $\rightarrow$   
 279 a. 2.48  $\downarrow$  e. 2.36  $\rightarrow$   
 b. 2.36  $\downarrow$  287 a. Same reverse die as 286 a.  
 280. 2.66  $\uparrow$  2.42  $\uparrow$   
 281. 2.36  $\uparrow$  b. 2.33  $\leftarrow$ ; 2.27  $\uparrow$   
 282 a. Same reverse die as 280. c. 2.24  $\uparrow$   
 2.39  $\downarrow$  288 a. 2.37  $\uparrow$ ; 2.40  $\downarrow$   
 b. 2.25  $\leftarrow$  (PLATE XLVII) b. Same reverse die as 286 b.  
 283. 2.29  $\downarrow$  2.29  $\downarrow$   
 284 a. Same reverse die as 283. 289. Same reverse die as 286 a,  
 2.38  $\leftarrow$  287 a. 2.34  $\uparrow$   
 b. Same reverse die as 279 b. 290.  $\Delta$  l behind Zeus head.  
 2.28  $\rightarrow$ ; 2.34  $\rightarrow$  a. 2.37  $\rightarrow$   
 c. 2.33  $\leftarrow$  b. 2.29  $\rightarrow$   
 285 a. 2.34  $\uparrow$  c. 2.41  $\downarrow$ ; 2.43  $\uparrow$   
 b. Same reverse die as 279 b, d.  $\Delta$ E to l. 2.34  $\uparrow$   
 284 b. 2.36  $\leftarrow$  e.  $\Delta$ E to l. 2.45  $\downarrow$ ; 2.37  $\uparrow$ ;  
 c. 2.39  $\downarrow$  2.48  $\rightarrow$   
 286 a. 2.47  $\rightarrow$  f. E to l. erased from die.  
 b. 2.31  $\leftarrow$  2.42  $\downarrow$ ; 2.25  $\downarrow$   
 c. Same reverse die as 285 c. 291.  $\Delta$  l behind Zeus head.  
 2.31  $\downarrow$ ; 2.28  $\downarrow$ ; 2.42  $\leftarrow$  a. 2.44  $\leftarrow$

- b. Same reverse die as 290c.      c. Same reverse die as 291c.  
     2.39 →      2.35 →  
 c. E to l. erased from die.      d. Same reverse die as 291d.  
     2.31 →      2.56 ↑  
 d. E to l. erased from die. 293. 2.39 ↑  
     2.33 → (PLATE XLVII)      294. 2.41 ← (PLATE XLVIII)  
 e. E to l. erased from die. 295. 2.29 → (PLATE XLVIII)  
     2.32 ↑      296 a. 2.41 ↑  
 292. ΔI behind Zeus head.      b. 2.28 ↑  
 a. 2.21 ←      297 a. Same reverse die as 293.  
 b. Same reverse die as 290c,      2.22 ↓  
     291b. 2.39 ←      b. 2.45 ↑

*ΛΥ above; A P to l. and r.; dolphin to r. below*

298. Circle of dots on obverse.      300. Circle of dots. Same obverse  
 a. 2.42 ←      die as 347 (Elis).  
 b. 2.22 →      a. Same reverse die as 298a,  
 c. 2.35 ←      299a. 2.29 →  
 d. 2.41 ←      b. Same reverse die as 298b,  
 e. Uncleaned. 2.41 ↓      299b. 2.34 ↑  
 299. Circle of dots. Same obverse      c. 2.33 ↓  
 die as 345 (Elis).      d. 2.40 ↓  
 a. Same reverse die as 298a.      e. Same reverse die as 299e.  
     2.43 →      2.23 →  
 b. Same reverse die as 298b.      f. Same reverse die as 299c.  
     2.40 ← (PLATE XLVIII)      2.28 ↓ (PLATE XLVIII);  
 c. 2.37 ←      2.31 ↑  
 d. 2.22 →  
 e. 2.22 ↓

Assignment of these six issues to Patras represents a radical departure from tradition. Earlier publications attribute Issue 1, and sometimes Issue 3 as well, to Ceryneia on the basis of Weil's reading of the monogram as KAPY.<sup>22</sup> The other trident strikings are given to Mantinea or Troezen, and the dolphin issue is listed as the output of Dyme or an uncertain mint. There are, however, valid grounds for associating the emissions and attributing them to the city of Patras.

<sup>22</sup> *Z/N* 1882, 245.

Taking the trident coinage first, it is evident that it forms an indivisible sequence. Die linkage between Issues 1 and 2 (Nos. 259–262) proves that the strikings belong together and that it is the trident and not the lettering in the field which indicates the minting authority. Even without this concrete evidence of transferred dies, one would be justified in associating the five trident issues, which not only share a symbol but show a marked homogeneity in the rendering of the compact, heavy heads in high relief.

Within the large ΔI issue there is both stylistic diversity and deterioration, ending in the crude obverses of Nos. 295–297. This is clearly the last trident striking, preceded by Issue 4 with Μ–ΔI. Whether Issue 3 belongs after the EY emission or at the beginning of the sequence is somewhat uncertain. Its reverse dies are cut with care. The trident is more elaborately delineated than on other strikings and in this issue alone a prominent pellet marks the junction of the diagonals of the League monogram. This evidence of painstaking workmanship suggests the initial stages of a coinage but there are considerations which indicate a later date. In Issue 1 the wreaths of the reverse are tied above and the trident prongs point left; in Issues 2, 4, and 5 the wreaths are tied below and the prongs point right. Issue 3 with ties below and prongs right would seem to belong after rather than before Issue 1. A later placement of Issue 3 also derives some support from the style of the obverse heads. They are very similar to those of the first issue of Elis and the Elean mint was almost certainly opened some years after the trident coinage started, which again implies that Issue 3 was not the first emission.

The trident mint contributed more coins to the Agrinion Hoard than any other Achaean League mint except Antigoneia and only Antigoneia and Megara surpass its record of obverse dies. Obviously the coinage was heavy and this is an important consideration in determining its origin. In attributing the trident issues, one must look for a mint likely to have produced a very substantial coinage and one for which the trident would have been the equivalent of a mint signature.

Ceryneia is improbable on both counts. It was an inland site of minor importance, known to have produced one issue of League



bronze but no autonomous coinage. Mantinea, to which some of the trident issues are often attributed, was at this period<sup>23</sup> called Antigoneia and we have a large League coinage marked AN. Apart from the chronological difficulty, the assignment of the coins to Mantinea on the basis of the trident symbol is not convincing. Poseidon and the trident play an insignificant role in the repertory of Mantinean coin types; the bear and the acorn are the common devices of the autonomous silver. It is in the highest degree improbable that the trident alone would have identified the coinage as that of Mantinea. A much stronger case can be made out for Troezen where the trident was the distinctive civic badge, used almost exclusively on autonomous silver and bronze. There are, however, objections to the Troezenian attribution. It is doubtful, as Miss Grace points out, that Troezen under the League was of sufficient size and importance to have produced a very large coinage, considerably larger, it might be noted, than that of Argos itself, the chief city of the Argolid. Furthermore, as we shall see later in the discussion of the League coinage as a whole, there seems to have been during this early period a rather clear-cut distribution of mints on a geographical basis. Two mints within the Argolid area is a definite deviation from the pattern. Finally, if the trident mint is Troezen, one might expect some stylistic similarity between its issues and those of nearby Argos. This is not the case. The trident issues bear no relationship to the contemporary issues of Argos. No one of these factors is in itself conclusive but taken together they cast doubt on the Troezenian origin of the trident series.

The arguments advanced against Troezen are the ones which speak most persuasively for Patras as the mint of the trident coinage. In concept and in execution the trident obverses show a pronounced

<sup>23</sup> The change of name occurred ca. 222 B.C.; our trident issues belong to the second century (see pp. 89–90). Miss Grace (*NNM* 74, 13–19) was the first to recognize that they must be dated after 222, but she tried to reconcile this with a Mantinean attribution by postulating a “factional upheaval” ca. 190–185 which left a numismatic record in the series of coins with a trident and **M** or **Μ** for Mantinea. This is purely hypothetical, as Miss Grace admits, and the coinage cannot be said to support the hypothesis since the **M** or **Μ** is almost certainly an indication of the issue and not the mint and the trident symbol has no close connection with Mantinea.

stylistic affinity with those of Sicyon, Elis and Megara.<sup>24</sup> It would seem to be somewhere in the northern or northwestern section of the Peloponnesus that the trident mint should be located. It is there, too, that one finds a surprising gap in the list of active League mints. During this early period there is coinage from the Corinth-Sicyon-Megara area, from Elis, from Arcadia, Messenia and the Argolid. There is apparently nothing from Laconia or Achaea. In the case of Sparta this is understandable; in the case of Achaea it is puzzling. At a later date several Achaeian communities produce League silver and one of them, Patras, strikes extensively. That there should be no earlier coinage from Achaea is very peculiar, particularly since there are no autonomous emissions to help account for the absence of League issues. Assignment of the trident series to Patras explains the stylistic parallels with northern mints and rounds out the numismatic picture. Achaea, the homeland of the Federation, did assume its share of financial responsibility through the substantial coinage of one of its major cities.

That the trident coins have never been attributed to Patras is undoubtedly due to the fact that the symbol on the later issues of that mint is the dolphin. Actually the two symbols are synonymous; either would be a suitable device for a seaport where the cult of Poseidon was strong.<sup>25</sup> Nor is the change in symbol unparalleled in the League series. As will be seen later, Dyme uses an Athena head on her first Federal issue and then replaces it with a fish.

Whatever reservations one may have about the source of the trident coins, Issue 6 with AY-AP and dolphin certainly belongs to Patras. Earlier attributions to Dyme were based on a misreading of the AY as ΔY by Weil and Löbbecke and on a misinterpretation of the symbol as a fish. As Miss Grace points out in connection with the Arcadia Hoard, the symbol is a dolphin and this being so, the mint is Patras which placed a dolphin on later Federal issues inscribed with the ΠA ethnic.

<sup>24</sup> PLATE XLVII, Nos. 244 a and 255 b; 270 b and 331 a; 424 and 273 a; 433. 291 d, 282 b and 442. PLATE XLVIII, 449 and 294.

<sup>25</sup> The Imperial issues of Patras frequently use as reverse type a standing Poseidon with trident and dolphin, a representation of the statue by the harbor mentioned in Pausanias VII. 21. 7 (Imhoof, "A Numismatic Commentary on Pausanias," *JHS* 1886, 84-85). Smaller bronzes show a trident alone.

Issue 6 is of special interest in that two of its three dies were used for coins of Elis. This phenomenon is discussed at some length in the commentary on the League coinage as a body, but it might be noted here that it probably explains the striking difference in style between the trident obverses and those of the dolphin issue. If the dolphin coins of Nos. 298–300 were not actually struck at Elis, their obverse dies were surely cut there.

The record of surviving material provided by the Agrinion Hoard and other sources is as follows:<sup>26</sup>

	<i>Agrinion Hoard</i>			<i>Other</i>	
	Coins	Obverse dies		Coins	New obverse dies
☼	14	10		20	1
EY	16	9 (2 carried over)		14	3
Κ-Ν	3	2		11	5
Μ-ΔΙ	18	6		17	1
ΔΙ	56	20		38	2
ΛΥ-ΑΡ	17	3		14	1

**Argos** 20 coins (part)

☼ above; wolf's head r. below  
(all wreaths tied above)

301. Head l.

- a. ☼ r. 2.43 ↓
- b. 2.43 ↓; 2.47 ↓
- c. 2.31 ↑

302. Head l.

- a. Same reverse die as 301a.  
2.45 ↓ (PLATE XLVII)
- b. Same reverse die as 301b.  
2.47 ↓; 2.42 ↓; 2.38 ↓

303. Head l.

- a. 2.50 ↑
- b. 2.36 ↑

304. Head l. 2.44 ↓

305 a. Overstruck.<sup>27</sup> 2.40 ↑

- b. ☼ above; ☼ l. 2.43 ↑;  
2.37 ↑

306. Same reverse die as 305b.

- 2.40 ↑; 2.40 ↑; 2.47 ↑

<sup>26</sup> Some of Clerk's entries need to be checked. The description of No. 184 is dubious but the coin is not illustrated; No. 186 is from a known die (our 272) which has no lettering on the obverse. The six varieties of the Κ monogram probably include misreadings but the plates are too poor to permit accurate corrections. Μ as well as Μ may exist in Issue 4; on all specimens I have seen, the cross-stroke is present although sometimes carelessly executed.

<sup>27</sup> The undertype is uncertain.

*Harpa r. above; A below*  
(all wreaths tied above)

307. Head l. 2.41 ↓; uncleaned,  
2.40 ↓ (PLATE XLVIII)

*Ɔ above; harpa r. below*

308. Circle of dots on obverse.  
2.44 ↑

In the Argive series the symbol rather than the lettering serves as the major control. The coins which are earliest in style and most worn in all hoards are those with the wolf's head device, usually combined with Ɔ.<sup>28</sup> Next come the harpa specimens with IΩ, A or Ɔ.<sup>29</sup> Finally, at a later period, the club appears with Ɔ and possibly A (see p. 68, n. 75).

For the first time in the League issues there is deviation from the standard representation of the obverse type. The Zeus head sometimes faces left instead of right in both the wolf's head and harpa emissions.

On the basis of the existing evidence the early Federal coinage of Argos seems to have been confined to two distinct issues of rather small size:

<i>Agrinion Hoard</i>			<i>Other</i>	
Coins		Obverse dies	Coins	New obverse dies
Wolf's head	17	6	18	2
Harpa				
IΩ	—	—	8	4
A	2	1	8	—
Ɔ	1	1	2	—

<sup>28</sup> If Clerk's No. 137 is accurately described, the wolf's head symbol is combined with A (or A) as well as with Ɔ.

Other entries in Clerk can be corrected. The monograms throughout are Ɔ and A. No. 138 is from the same reverse die as our 305 b with Ɔ above and repeated in the left field; No. 140, if correctly reported, probably has the same combination. The E of No. 148a is almost certainly I. Die breaks are responsible for what seem to be letters in the field of No. 150, and Clerk's record of markings in the field of No. 151 is not supported by the description of the coin in the Hunterian Catalogue (p. 131, 17).

<sup>29</sup> The stylistic similarity and limited number of obverse dies in the harpa series point to a single emission rather than three separate issues.

**Corone** 6 coins

Ξ E to l. and r.; KO below

309. Head l. 2.38 →; 2.33 ←

310. Head l. 2.34 →

311. Head l.

a. Same reverse die as 310.

2.36 ← (PLATE XLVII)

b. 2.38 →

312. Head l. 2.50 ←

This issue has been assigned to Messene, to Megalopolis and to Corone (?).<sup>30</sup> The last attribution is almost certainly correct. An association with Messene (or Megalopolis) is based on the rather tenuous grounds of style and recurrence of the letters ΞE. The combination, however, is found at other League mints (see p. 117) and a similarity of style between issues of Corone and Messene is scarcely surprising in view of the geographical proximity and political ties of the two towns.

The strongest argument against the Messenian attribution is the absence of M or ME, invariably present on issues of that mint. Unless one assumes that the ΞE-KO striking belongs with the very few examples of League money without clear indication of the issuing authority,<sup>31</sup> one or the other combination must denote the mint.

<sup>30</sup> Clerk, No. 312 and page v; *ZfN* 1908, 291; *NNM* 74, 26; *Hesperia* 1939, 151. The usual assignment is either Messene or Corone (?). Miss Grace gives the striking to Megalopolis in line with her reattribution of a number of Messenian issues. Objections to her arrangement are outlined in the commentary under Messene (pp. 33-37).

<sup>31</sup> These are very few indeed. Among the uncertain coins of the standard publications, No. 329 of Clerk and Nos. 146-148 of Crosby-Grace can be assigned to Patras on the evidence of the dolphin symbol. Clerk's 331a is surely Antigoneia with AN below and E Y to l. and r.; his 331 and No. 145 of Crosby-Grace, with trident below and E Y to l. and r., are simply variants of Issue 2 of the sequence assigned to Patras in the preceding pages. Our 469 and Clerk's 327-328 have Λ below and Y to r. They may be coins of Antigoneia on the evidence of a good coin in the ANS Cabinet which shows that A was also present on the reverse die (p. 50).

There remain Clerk's 330, which seems to have AY above and AA to l. and r., and his 222, with E Y to l. and r., as examples of legible coins carrying no precise indication of origin. On all other issues the mint is identified by a symbol or letters. Although we sometimes have difficulty in interpreting the mint marks, there is no reason to suppose that the users of the currency found them ambiguous.

Since  $\Xi E$  cannot be the beginning of an ethnic, the possibilities are Corinth, Corone or Cortys (Gortys). The first has two series of Federal currency, marked with a *koppa* or a Pegasus, and these bear no stylistic relationship to the KO emission. Cortys cannot be ruled out but her insignificance as a mint is underscored by the fact that the only record of coinage is League bronze. Corone, which struck a fairly substantial amount of autonomous silver and bronze <sup>32</sup> as well as League bronze, is surely the obvious source of this KO issue.

*Agrinion Hoard**Other*

Coins	Obverse dies	Coins	New obverse dies
6	4	9	2

**Messene** 67 coins (part)

*ME with  $\Xi E$ ,  $\Pi \Lambda$ , X*

313. Head l.  
 a.  $M E$  to l. and r.;  $\Pi \Lambda$  below.  
 2.34 ↓ (PLATE XLVII)  
 b.  $ME$  above;  $\Xi E$  to l. and r.;  
 $\Pi \Lambda$  below. 2.44 ←
314. Head l.  $\overline{X}$  above;  $\Xi E$  to l.  
 and r.;  $ME$  below. 2.45 ↓
- 315 a.  $\Xi$  to l.;  $ME$  below. 2.42 ↑  
 b.  $\overline{X}$  above;  $\Xi E$  to l. and r.;  
 $ME$  below. 2.43 ↑; 2.41 ←;  
 2.44 ←
316. Same reverse die as 315b.  
 2.35 ↓

*M or ME with  $\Delta$  or  $\Pi \Delta$*

- 317 a.  $\Delta$  to r.;  $ME$  below.<sup>33</sup> 2.32 ←  
 b.  $\Delta$  to l.;  $ME$  below. 2.39 →
318.  $\Pi \Delta$  to l. and r.;  $M$  below.  
 2.40 ↑
319.  $\Pi \Delta$  to l. and r.;  $M$  below.  
 2.09 ↑

<sup>32</sup> Three hemidrachms in good condition were in the Olympia Hoard, indicating contemporaneity with the late Federal issues of that deposit. The appearance of these autonomous issues in the hoard might be said to strengthen the case for the attribution of League silver to Corone since all other autonomous coins of second century date found in the Olympia Hoard and in similar Achaean League hoards come from mints which produced Federal silver.

<sup>33</sup> The marking below the League monogram is not certain on 317a and b, but a hemidrachm in Leningrad with  $\Delta$  to l. has the  $ME$  monogram below.

It is often difficult to determine whether  $ME$  or  $M$  is the intended form due to careless execution of the mint mark. Variations of  $ME$  given by Clerk and others are very likely either misreadings or the result of sloppy workmanship.



*A Π to l. and r.; M below*

- 320 a.  $\Pi$  A to l. and r. 2.39  $\leftarrow$ ; 2.44  $\uparrow$  c. 2.38  $\downarrow$ ; 2.41  $\uparrow$ ; 2.40  $\rightarrow$ ;  
2.34  $\downarrow$   
b. M above. 2.46  $\rightarrow$  Not illustrated.

*N Φ to l. and r.; M below*

321. Φ above; M below. 2.40  $\uparrow$  d. 2.33  $\uparrow$ ; 2.39  $\uparrow$   
322. 2.42  $\leftarrow$  e. 2.39  $\uparrow$ ; 2.42  $\uparrow$   
323. Head l. f. 2.38  $\rightarrow$ ; 2.37  $\rightarrow$ ; 2.33  $\downarrow$   
a. 2.38  $\downarrow$  g. 2.32  $\uparrow$ ; 2.37  $\uparrow$ ; 2.33  $\uparrow$ ;  
b. 2.34  $\rightarrow$  2.43  $\leftarrow$   
c. 2.35  $\uparrow$  (PLATE XLVIII)

*ΞΕ above; O P to l. and r.; M below*

324. Head l.; circle of dots. b. 2.40  $\uparrow$   
a. M above; O P to l. and r.; c. 2.39  $\leftarrow$ ; 2.34  $\leftarrow$ ; 2.45  $\uparrow$   
ΞΕ below. 2.37  $\rightarrow$ ; 2.43  $\rightarrow$  d. OP above; O N to l. and r.;  
b. 2.36  $\rightarrow$  (PLATE XLVIII) M below. 2.35  $\rightarrow$   
e. OP above; O N to l. and r.;  
c. 2.43  $\leftarrow$  M below. 2.38  $\rightarrow$ ; 2.44  $\rightarrow$ ;  
d. 2.42  $\leftarrow$  2.45  $\downarrow$ ; 2.32  $\downarrow$   
325. Circle of dots on obverse.  
a. Same reverse die as 324d.  
2.36  $\rightarrow$

*✕ above; M below*

326. Same obverse die as 325. c. 2.45  $\uparrow$  (PLATE XLVIII);  
2.46  $\downarrow$   
a. 2.36  $\leftarrow$   
b. 2.41  $\rightarrow$ ; 2.35  $\downarrow$  329. Circle of dots on obverse.  
327. Circle of dots on obverse. a. Same reverse die as 326a,  
Same reverse die as 325b. 328a. 2.36  $\downarrow$   
2.44  $\leftarrow$ ; 2.33  $\leftarrow$  b. 2.39  $\uparrow$   
328. Circle of dots on obverse. c. 2.39  $\leftarrow$   
a. Same reverse die as 326a. d. 2.36  $\downarrow$ ; 2.35  $\uparrow$   
2.41  $\rightarrow$  e. 2.43  $\rightarrow$ ; 2.38  $\downarrow$ ; 2.37  $\uparrow$   
b. 2.35  $\uparrow$

The series of M-ME coins here attributed to Messene must be considered in relation to the coinages of Megalopolis and Pagae-Megara since some or all of the issues have in the past been assigned to those mints.<sup>34</sup>

Within the Achaean League series there are three issues which are indubitably striking of Megalopolis: our Nos. 466-467, 472-474 marked with a pedom and M, a syrinx and M, and a syrinx alone. The attribution of these issues to the Arcadian city has never been disputed. A fourth issue, with M or ME over a fulmen (our 471) is given to Megalopolis by Weil, Löbbecke and Crosby-Grace; to Messene by Clerk. On PLATES XXXVIII-XXXIX (471-474) the fulmen issue and the second syrinx striking of Megalopolis are shown in juxtaposition. The four obverse dies are unmistakably from the same hand and the two issues are further connected by the  $\Xi$ B or B $\Xi$  control combination which appears on the reverse of the fulmen coins and on the obverse of those with syrinx. Clerk's separation of the two issues is not supported by the numismatic evidence.

The four emissions with symbols belong to Megalopolis, but what of the M-ME striking without symbols. Before discussing these as a group, it will be well to dispose of the Pagae-Megara mint to which one issue is given by Clerk<sup>35</sup> and Crosby-Grace, a striking with  $\Pi$  A or A  $\Pi$  to left and right and M below. The attribution is based on an interpretation of the lettering as referring exclusively to the striking authority, but this is dangerous ground. Is it any more likely that  $\Pi$ A-M stands for Pagae-Megara than that FA-AN, for example, denotes Elis-Antigoneia and AIGI-KO Aegium and Corinth or Corone? The assumption that in the case of Pagae-Megara alone there is a joint emission with the name of the second mint replacing the usual control combination is on the face of it a dubious premise and one which is not substantiated by the coinage.

<sup>34</sup> Clerk, 9, 13, 18 f.; Weil, *ZfN* 1882, 262, 268; Löbbecke, *ZfN* 1908, 294 f.; Crosby-Grace, *NNM* 74, 25-27. The attribution of issues in the Western Greece Hoard (*Hesperia* 1939, 148ff.) corresponds with that proposed in the present study.

<sup>35</sup> Clerk's attribution is tentative; in his introduction (page v) he suggests the possibility of a Messenian origin. Two other issues listed under Pagae-Megara by the same writer have no connection with the  $\Pi$ A-M striking. No. 133 is another example of our 313a and from the same obverse die, while 134 is a variant of the same issue, like the Olympia Hoard specimen cited below (note 38). In both cases  $\Pi$ Λ has been read as  $\Pi$ A.

To argue that Megara already has an extensive coinage marked with a cithara and bearing no stylistic similarity to the ΠΑ-M issue is not conclusive for the coins might have been struck at Pagae and M instead of the cithara used to distinguish them from the normal Megarian emissions. Far more significant is the connection between the ΠΑ-M striking and other M issues which cannot come from Pagae-Megara. On the coins here assigned to Messene there are various combinations (ΠΛ, ΠΔ, ΠΑ or ΑΠ) associated with M or ΜΕ. Of these, the first two must be control combinations; there is no reason to suppose that the third is anything else. Furthermore, coins with ΠΔ and ΠΑ are linked by a transferred obverse die (PLATE XXVI, A and B), and Obverse 320 of the ΠΑ striking is so close in style to Obverse 322 of the ΝΦ-M issue as to be attributable to the same hand. The three emissions are from the same mint and that mint cannot be Pagae.

It remains to determine the origin of the M-ΜΕ series without symbols. Apart from the Pagae-Megara attributions already mentioned, Löbbecke and Crosby-Grace give all issues to Megalopolis; Clerk calls them Messenian except for the ΝΦ-M striking which he lists under Megalopolis; Weil assigns the group as a whole to Megalopolis with the exception of an example of our first issue which he lists under Messene. Whether right or wrong, the arrangement of Löbbecke and Crosby-Grace has the merit of consistency, and it seems to me that their basic premise is correct. The issues belong together. Either they are all part of the Megalopolitan sequence or they are all the output of a second M mint, which must be Messene.<sup>36</sup> Allocating some to Megalopolis and some to Messene, as Clerk and Weil do, introduces an element of confusion into the otherwise orderly pattern of the Achaean League coinage. Once symbols and letters or monograms appear on the coins, the issuing authority is explicitly defined by these markings.<sup>37</sup> To assume that M or ΜΕ alone was used by both Megalopolis and Messene implies that no effort was made to distinguish the issues of the two mints and this represents such a striking deviation from standard procedure as to be implausible. If

<sup>36</sup> Only two other League mints begin ΜΕ: Megara, already provided with a homogeneous series of cithara coins, and Methydrium, a small community unlikely to have been the source of a silver coinage of this size and variety.

<sup>37</sup> For the few instances of imprecision, see p. 30, note 31.

Messene produced no League silver during this early period, as Miss Grace suggests, the designation of some Megalopolitan issues by a simple M or ME would create no problem of identification. The crux of the matter is whether or not the M issues, with and without symbol, can be related as a single series.

All known varieties of the M-ME coinage without symbols are found in the Agrinion Hoard.<sup>38</sup> They seem to form six distinct issues. The initial striking uses in various combinations and positions  $\Xi E$ ,  $\Pi \Lambda$  and X as control marks. Although the pattern is erratic ( $\Pi \Lambda$  alone or with  $\Xi E$ ,  $\Xi$  or  $\Xi E$  or  $\Xi E N \Omega$  alone, and  $\Xi E$  with X) and three different obverse styles are represented, die linkage and the recurrence of  $\Xi E$  point to a single issue. Within the second issue there is some variation in reverse markings:  $\Delta$  or  $\Pi \Delta$ . Since  $\Pi \Delta$  must be taken as two separate controls and not the first two letters of a word, it is reasonable to assume that  $\Delta$  was first used alone and later combined with  $\Pi$ .

As noted above, the third issue is linked with the second by a die not represented in the Agrinion Hoard, the transfer illustrated on PLATE XXVI. A (from Paris 2.48 gm.  $\rightarrow$ ), has  $\Pi \Delta$  on the reverse while B (No. 138 of the Arcadia Hoard, now in the ANS Cabinet) is inscribed  $\Pi \Lambda$ .

One reverse of the fourth issue has  $\Phi$  alone; all others are marked  $N \Phi$ , again two separate controls. An obverse die of this issue is almost identical in style to one of the third emission (Nos. 320 and 322). The first obverse of the fifth issue is from the same hand as No. 323 but a circle of dots now frames the head. A second die of very similar style shows the head to the right instead of left and this position is maintained through the  $\times$  emission for heads of gradually reduced size. An obverse die is shared by Nos. 325 and 326, thus linking the two issues.

<sup>38</sup> Minor variants of the first issue exist: ME above and  $\Pi \Lambda$  to l. and r. in the Olympia Hoard; ME above,  $\Xi E$  to l. and r.,  $N \Omega$  below in Berlin; ME above,  $\Xi E$  to l. and r.,  $\Pi$  below in Leningrad;  $\Xi E$  to l. and r., ME below in the Western Greece Hoard.

Clerk's list adds little, if anything, to the record. His 298-299 are examples of our 317;  $\Delta$  (not A) is clear on the plate. No. 308 is a misreading of a reverse with the inscription of our 313 b, and No. 296 is from the same obverse die as our 315 and seems to have more lettering than Clerk describes, but the coin is in bad condition. No. 305 is something of a problem. It is from the same obverse die as our 321 and the two reverses are probably identical, with 321 the later stage. There is no trace of  $\Xi E$  on the Agrinion specimen.

3\*

This M-ME coinage without symbols, despite its early irregularities, reveals a basic unity. At least five of its issues are related and in all probability are fairly close in time. Can the four Megalopolitan strikings be inserted into the sequence?

The coins with pedom, syrinx or fulmen are illustrated on PLATES XXXVIII-XXXIX. It is immediately apparent that they fall into two groups. Nos. 466-467 (PLATE XXXVIII) are extremely close in style, as are Nos. 471-474 (PLATES XXXVIII-XXXIX). The earlier obverses are also fairly close in style to one die of the NΦ issue (PLATE XLVIII 321 and 467a). It would be possible to insert these two issues of Megalopolis into the M-ME series without symbols between Nos. 320 and 321, even though this means separating by at least two years Obverses 320 and 322 with their marked stylistic relationship and assuming that the mint interpolated two strikings with symbols in the middle of a coinage without symbols.

Nos. 471-474 with fulmen or syrinx are later than Nos. 466-467 on the evidence of style and of wear on the hoard coins. The obverse dies with their very low relief and sharply delineated heads are unlike anything in the M-ME coinage without symbols. Moreover, the last three issues of the latter series, with their stylistic homogeneity and die linkage, cannot be separated. If this is all one coinage, the only place for the fulmen and syrinx issues would be after the ⚡ emission (Nos. 326-329), postulating a time interval to account for differences in style and wear. There is, however, a grave objection to this arrangement. The ⚡ issue and its die-linked predecessor have obverse heads surrounded by a circle of dots; the fulmen and syrinx coins have no dots. Throughout the early stages of the Achaean League coinage the obverses are undotted. About 170 B.C. or slightly later (see p. 88) the circle appears, and from that time on the striking mints use this decorative feature. The one exception is Megalopolis. No obverse in either the Arcadian or Achaean coinage which can definitely be attributed to that mint has a dotted border. The crucial point is that once the convention of dots was adopted at a given mint, it was observed consistently.<sup>39</sup> Two issues without dots following two issues

<sup>39</sup> An occasional die may lack the circle, as in the case of one Argive piece (No. 601), but this can be nothing more than a diecutter's error since all other dies of the same issue have dots.

with dots at one and the same mint is perhaps not impossible but it is in the highest degree unlikely. On the evidence of the dots alone there is a strong case for assigning the fulmen and syrxn issues to a different workshop.

Other considerations support the attribution to Messene of this Achaean League series with M-ME alone. She was a League mint at a later period, for there is at least one issue, with MEΣ, which can belong nowhere else, and it is noteworthy that her late Federal money and a contemporary autonomous issue (Nos. 606-609) are in the same stylistic tradition as the last of the issues under present discussion. In view of her political and economic importance in the second century it would be surprising if Messene had no earlier League money. Miss Grace's hypothesis that Messene was "too incoherent to coin before 182" and after that date "too unimportant a state to strike federal silver" is contradicted by an extensive series of autonomous hemidrachms with tripod type and MEΣ legend which prove more conclusively than any Federal coinage that Messene was a powerful state during the last decades of the League's existence.<sup>40</sup>

The present division of the M-ME sequence between Megalopolis and Messene is in accord not only with the numismatic evidence but also with what we know of the coining history of the two mints. At the time that Messene began her League issues, Megalopolis was producing money of the old Arcadian type (see pp. 83-84). M or ME was sufficient identification of the Messenian source of the new Federal money. When Megalopolis at a later date put out her first issues of League silver, she had no choice but to add a symbol to the M mint mark to distinguish her coinage from that of Messene, and this basic distinction between the two coinages continued to be observed for subsequent issues.

Despite the diversity of reverse markings and the number of surviving coins, Messene's output of early Federal silver was not unduly large. Nineteen obverse dies are listed below and the high ratio of coins to dies in every issue but the second indicates that the record is substantially complete.

<sup>40</sup> The issues occur in good condition in the Olympia, Western Greece and Caserta Hoards and must be contemporary with the late Federal coinage.

Agrinion Hoard			Other	
	Coins	Obverse dies	Coins	New obverse dies
ΠΛ, ΞΕ	8	4	21	—
Δ, ΠΔ	4	3	18	3
ΑΠ	7	1	14	1 (carried over)
ΝΦ	16	3	35	—
ΞΕ-ΟΡ	15	2	37	—
⌘	17	4 (1 carried over)	38	—

**Elis** 73 coins (part)

*Eagle above;  $\frac{N}{\Sigma} \frac{I}{\Omega}$  to l. and r.; FA below*

330. 2.41 ↑

331 a. Same reverse die as 330.  
2.42 ↑ (PLATE XLVII)  
b. 2.40 ↓

*F A to l. and r.;  $\frac{C\Omega}{AN}$  below*

332. 2.41 →; 2.34 ↑

333. FA CI to l. and r.;  $\frac{C\Omega}{AN}$  below. 2.44 ←; 2.39 ↓

334 a.  $\frac{C\Omega}{CIA}$  below. 2.27 ↑  
b.  $\frac{C\Omega CI}{AN}$  below. 2.41 ←

335.  $\frac{C\Omega CI}{AN}$  below. 2.43 ↓ (PLATE XLVII)

*F A to l. and r.; ΦI below*

336. 2.41 ↓

*A N to l. and r.; FA below*

337 a. 2.41 ↓

b. 2.36 ↑

c. FA above. 2.43 →

d. FA above. 2.31 ←

d. Same reverse die as 337d.  
2.29 →; 2.36 →

339 a. Same reverse die as 338a.  
2.28 ↑

338 a. 2.34 →; 2.27 ↑

b. Same reverse die as 337b.  
2.33 →

c. Same reverse die as 337c.  
2.53 ↑; 2.37 ←

b. FA above. 2.41 ↓

340 a. 2.21 →  
b. Same reverse die as 339b.  
2.37 ↑

- 341 a. 2.34 → c. AN above; F A to l. and r.  
 b. Same reverse die as 339 b, 2.35 ↑  
 340 b. 2.36 ↓; 2.38 ↑; d. AN above; F A to l. and r.  
 2.39 ↓; 2.41 ← 2.27 ↓ (PLATE XLVII)

*ΛΥ above; F A to l. and r.*

342. Circle of dots. ΛΥ to l. and r.; FA below. 2.29 ← e. 2.45 ←  
 343. Circle of dots. f. 2.38 ↓ (PLATE XLVIII)  
 a. 2.42 ← g. 2.42 ↓  
 b. 2.42 ↓; 2.36 ↑ Not illustrated. 346. Circle of dots.  
 344. Circle of dots. a. Same reverse die as 345 g.  
 a. Same reverse die as 343 b. 2.42 ←; 2.31 ↑  
 2.44 ← b. 2.39 ↑  
 b. 2.43 → c. 2.50 ↑; 2.43 ↓  
 c. ΛΥ to l. and r.; FA below. d. 2.39 →  
 2.43 ← 347. Circle of dots. Same obverse die as 300 (Patras).  
 345. Circle of dots. Same obverse die as 299 (Patras). a. Same reverse die as 346 d.  
 2.42 ← (PLATE XLVIII)  
 a. 2.47 ↑ b. Same reverse die as 345 a.  
 b. 2.41 ← 2.40 ←  
 c. 2.46 ↓ c. 2.34 ↑  
 d. 2.28 → d. 2.43 ↓; 2.46 →

*ΛΥ above; F A to l. and r.; ΣΩ below*

348. Same obverse die as 343. 351. Circle of dots.  
 a. 2.34 ← a. 2.38 ↓  
 b. 2.39 →; 2.40 ↑ b. 2.33 ↑  
 349. Same obverse die as 344. c. 2.27 ↓  
 a. 2.43 ↓ 352. Circle of dots. Same reverse die as 351 c. 2.53 ↑  
 b. 2.39 ↑; 2.43 → 353. Circle of dots. Same reverse die as 351 c, 352. 2.32 ←;  
 350. Circle of dots. 2.39 ←  
 a. 2.41 ↑  
 b. 2.41 ↓; 2.30 ↑



The early coinage of Elis consists of five issues if the  $\Sigma\Omega$  combination added to some dies of the  $\Lambda Y$  emission is considered a secondary control rather than indication of a separate issue. Two obverse dies (Nos. 343–344 and 348–349) are used with both forms of the reverse.<sup>41</sup>

Style and special features determine the sequence. The  $\Lambda Y$  issue with a circle of dots around the Zeus head clearly comes at the end, preceded by the  $\Lambda N$  striking; the large flat heads of the two emissions are similar in treatment. An eagle appears as the symbol on one striking which must be early in view of the condition of the coins. The logical explanation of this unusual issue is that it represents a brief experiment at the very beginning of the coinage. There is no certainty as to the relative position of the  $\Sigma\Omega$  and  $\Phi$  issues.

This is apparently a coinage of modest size. The 152 coins listed below were produced by 26 obverse dies, giving an overall ratio of about 6 coins per die and an even higher ratio for each of the last three issues. Our record of the obverse dies used for the early League coinage of Elis may be nearly complete.

	<i>Agrinion Hoard</i>		<i>Other</i>	
	Coins	Obverse dies	Coins	New obverse dies
$\Lambda\Sigma\Omega$	3	2	4	1
$\Sigma\Omega$ CIAN	7	4	16	3
$\Phi$ I	1	1	6	—
$\Lambda N$	22	5	15	—
$\Lambda Y$ , $\Lambda Y$ - $\Sigma\Omega$	40	10	38	—

<sup>41</sup> Variant readings, especially in the  $\Sigma\Omega$ CIAN series, are found in published studies. No. 22 of the Arcadia Hoard was acquired by E. T. Newell; it is inscribed  $\Sigma\Omega$ AV (not  $\Sigma\Omega$ N) below the League monogram. Clerk's Nos. 284–289 cannot be accurately checked due to the poor quality of the plate but I doubt there are any versions of the inscription not recorded in the present catalogue. A definitive correction of Clerk's 279, a very worn coin, is also difficult; it probably has  $\Lambda Y$  above the monogram.

**Antigoneia** 185 coins

*A N to l. and r.; ~~AP~~ below*

- |                                   |  |
|-----------------------------------|--|
| 354 a. 2.32 ↑                     | b. Same reverse die as 359e.           |
| b. 2.25 ←                         | 2.43 ↑                                 |
| c. 2.42 ←                         | c. $\mathbb{N}$ A to l. and r. 2.48 ↓; |
| 355 a. Same reverse die as 354c.  | 2.39 ←                                 |
| 2.44 ←                            | d. 2.48 →                              |
| b. 2.31 →                         | e. 2.44 →                              |
| 356 a. Same reverse die as 354c,  | 362 a. 2.39 ↓                          |
| 355 a. 2.50 ↑; 2.48 →             | b. Same reverse die as 358b,           |
| b. Same reverse die as 355 b.     | 359a. 2.38 ←                           |
| 2.35 →                            | c. 2.45 ↑; 2.39 ↑                      |
| c. Same reverse die as 354 b.     | d. 2.43 ↑                              |
| 2.35 →                            | 363 a. Same reverse die as 362d.       |
| d. 2.43 ←                         | 2.39 →                                 |
| e. 2.33 ↑                         | b. 2.37 →                              |
| f. 2.47 ↑                         | c. 2.36 ↓                              |
| 357 a. Same reverse die as 356f.  | d. 2.44 ↓                              |
| 2.39 ↓                            | e. 2.35 →                              |
| b. 2.34 ↑                         | f. 2.32 ↓                              |
| 358 a. Same reverse die as 357 b. | 364. Same reverse die as 363f.         |
| 2.41 ↓                            | 2.37 →                                 |
| b. 2.37 ←                         | 365 a. Same reverse die as 363 e.      |
| 359 a. Same reverse die as 358 b. | 2.44 ↓                                 |
| 2.38 →                            | b. 2.33 ←                              |
| b. 2.41 →                         | c. 2.38 ↓                              |
| c. 2.33 ←                         | d. 2.32 ↑                              |
| d. 2.47 ↑                         | 366 a. Same reverse die as 365 b.      |
| e. 2.28 ↑                         | 2.31 →                                 |
| f. 2.35 ↓                         | b. 2.32 ←; 2.34 ↓                      |
| 360 a. Same reverse die as 359f.  | c. 2.32 ↑                              |
| 2.41 →; 2.30 ↑                    | 367. 2.28 ←                            |
| b. 2.38 → (PLATE XLVII)           | 368. 2.39 ↑                            |
| 361 a. Same reverse die as 360b.  | 369 a. 2.22 →                          |
| 2.43 ↑                            | b. 2.39 ←                              |

*A N to l. and r.; CΩ below*

370. 2.39 ↓  
 371. 2.39 →  
 372. Uncleaned. 2.04 ↑  
 373 a. N A to l. and r. 2.48 ↓  
      b. 2.23 ↑  
 374. Same reverse die as 373 b.  
      2.35 ↑  
 375. 2.34 ↑  
 376 a. Same reverse die as 375.  
      2.38 ↑  
      b. 2.39 ←  
 377 a. Same reverse die as 375,  
      376 a. 2.39 ←  
      b. Same reverse die as 376 b.  
      2.34 ↑; 2.40 ↑  
 378. Same reverse die as 376 b,  
      377 b. 2.32 ←; 2.34 ↓  
 379 a. Same reverse die as 376 b,  
      377 b, 378. 2.29 →  
      b. 2.26 ↓  
      c. 2.30 ↑  
      d. 2.40 →  
 380. Same reverse die as 379 c.  
      2.29 ↑  
 381 a. 2.35 ←  
      b. 2.43 →  
      c. Same reverse die as 379 d.  
      2.38 ←  
 382 a. Same reverse die as 379 d,  
      381 c. 2.32 ←  
      b. 2.37 ↓  
 383 a. Same reverse die as 379 b.  
      2.42 ↑  
      b. 2.43 ↓; 2.41 ←  
 384. Same reverse die as 383 b.  
      2.35 ↑
- 385 a. Same reverse die as 382 b.  
      2.28 ↑  
      b. 2.45 ↓  
      c. 2.33 ↓  
 386 a. Same reverse die as 385 c.  
      2.43 ↑; 2.29 ↑  
      b. Same reverse die as 385 b.  
      2.47 ↑  
      c. 2.31 →  
      d. 2.44 ←  
      e. 2.37 →  
      f. 2.43 ←  
 387 a. Same reverse die as 386 f.  
      2.41 ↑  
      b. Same reverse die as 386 e.  
      2.27 →  
      c. 2.36 →  
      d. 2.38 ↓  
      e. 2.36 ↓  
 388. 2.37 →  
 389. 2.36 ↑  
 390 a. 2.43 ↓  
      b. 2.19 ↓  
      c. 2.40 ↓  
 391 a. 2.35 ↑  
      b. Same reverse die as 390 c.  
      2.42 ←; 2.28 →  
 392. Same reverse die as 390 c,  
      391 b. 2.35 ←  
 393 a. CΩΠ below. 2.39 →  
      b. CΩ  
      Π below. 2.38 →  
 394 a. CΩΠ below. 2.45 ↑  
      b. CΩ  
      ΠΛ below. 2.34 ↓

395. Same obverse die as 392. 405 a. Same reverse die as 404 b.  
2.52 → 2.40 ↓  
396 a. 2.38 ←; 2.42 →; 2.34 ↓; b. 2.32 ↓  
2.37 ↓ c. 2.39 ↑  
b. 2.40 ← d. 2.32 ↑; 2.40 ←  
397 a. Same reverse die as 396 b. e. 2.30 ↑  
2.44 ← 406 a. Same reverse die as 405 e.  
b. 2.49 →; 2.36 → 2.37 ↓ (PLATE XLVII)  
c. 2.41 ↑ b. Same reverse die as 405 d.  
d. 2.34 ↑ 2.31 ↑  
e. 2.37 ↑; 2.32 ↓ c. 2.37 →  
398 a. Same reverse die as 397 e. d. 2.47 ↓; 2.36 ↑; 2.36 ↓  
2.41 ↓ 407. 2.39 →  
b. 2.35 ← 408. 2.40 ↑  
c. 2.37 ↓ 409. Same reverse die as 408.  
399 a. Same reverse die as 398 c. 2.37 ←  
2.31 ↑ 410. 2.37 →  
b. Same reverse die as 397 e, 411 a. 2.33 ←  
398 a. 2.39 ↓; 2.40 ↓ b. 2.33 ↓  
c. 2.36 ↑ 412. Same reverse die as 411 b.  
d. 2.41 ↑ 2.38 ←  
e. ΛΥ below. 2.41 ← 413. 2.33 →; 2.38 ←  
f. 2.32 ← 414. 2.27 →  
400 a. Same reverse die as 399 f. 415. 2.36 ↑  
2.39 ↑ 416. 2.43 ←  
b. 2.33 ↓ 417. 2.41 ←  
c. 2.35 ↑; 2.41 ↑ 418 a. Same reverse die as 417.  
401. 2.37 →; 2.37 ↓; 2.46 → 2.29 ↓  
402. 2.45 ↑ b. 2.38 ↓  
403. 2.22 ↓; 2.34 ↑ 419 a. Same reverse die as 418 b.  
404 a. 2.26 → 2.30 ←  
b. 2.32 ↑ b. 2.29 ←

E Y to l. and r.; AN below

420. 2.20 ↑; 2.36 ↑

421. 2.52 ↑

422 a. 2.55 ↑

b. 2.49 ↑

c. 2.43 ↑; 2.30 ↑

d. 2.48 ↑; 2.28 ↑; 2.45 ↑

All known varieties of the Achaean League money of Antigoneia are included in the Agrinion Hoard.<sup>42</sup> Although the catalogue follows general practice in dividing the AN-EY and EY-AN coins, it is almost certain that this is a single emission and that Antigoneia struck only three distinct issues of League coinage.

The issues, furthermore, are contemporary. Even without the conclusive proof of die linkage, this would be apparent from the condition of the Agrinion coins, all showing signs of considerable wear, and from stylistic parallels. Two distinctive types of Zeus head dominate the coinage. The first, found on practically all obverses of the  $\overline{\text{AP}}$  issue, on Nos. 393–394 of the  $\text{C}\Omega$  issue, and on Nos. 413–419 of the EY issue, shows a large head with rather loose treatment of the hair and a peculiar rendering of the eye which gives the impression of sleepiness. The second style, characteristic of most obverses of the  $\text{C}\Omega$  and EY issues, is neater and more compact. Toward the end of the coinage a third style appears, illustrated by Nos. 420–422.

Die links provide evidence for both contemporaneity and sequence. The obverse die of Agrinion 369, with  $\overline{\text{AP}}$  reverse, is found in the Arcadia 1929 Hoard with a  $\text{C}\Omega$  reverse;<sup>43</sup> the obverse dies used for Agrinion 392, 393 and 394 in the  $\text{C}\Omega$  issue carry over into the EY emission, the last used with both AN-EY and EY-AN reverses.<sup>44</sup>

<sup>42</sup> The twelve entries in Clerk include a number of misreadings. Nos. 195, 196, 202, 203 (illustrated on his plate VIII) are all marked  $\overline{\text{AP}}$ ; what is taken to be a different monogram below a  $\Pi$  on No. 203 is merely an elaborate wreath tie under the standard monogram (the reverse is our 356f).

Variations such as  $\overline{\text{AP}}$  and  $\overline{\text{AP}}$  and the addition of  $\Pi$  or  $\Pi \Delta$  to the  $\text{C}\Omega$  control have no significance in terms of separate issues. The presence of  $\Lambda\text{Y}$  on one reverse of the EY striking would seem to be nothing more than a diecutter's error.

<sup>43</sup> *NNM* 74, No. 70.

<sup>44</sup> In the case of the obverse die used for Agrinion 392 and 395, a diebreak in front of the brow establishes the sequence. The die of Agrinion 393 is found in the Olympia Hoard with a reverse marked AN-EY and that of Agrinion 394 with both AN-EY (Rosenberg LXIX, 1930, 2350) and EY-AN (ANS-ETN, PLATE XXXV, C; 2.39 gm. →).

Although short-lived, the coinage of Antigoneia was abundant. The following tabulation establishes this clearly:

	<i>Agrinion Hoard</i>			<i>Other</i>	
	Coins	Obverse dies		Coins	New obverse dies
ΑΡ	55	16		29	2
Ω	56	25		41	3
EY	64	25 (1 carried over)		35	7
E Y	10	3		10	5

At least 85 obverse dies were used for the three issues of Antigoneian coinage and the ratio of known coins and dies is so low for all issues that one must assume many more obverses were originally employed.

**Megara** 58 coins (part)

*Cithara above; ME ΓΩ to l. and r.*

- |                                 |                                |
|---------------------------------|--------------------------------|
| 423. 1.95 ↑                     | 426. Same reverse die as 425c. |
| 424. Same reverse die as 423.   | 2.47 →                         |
| 1.99 ←; 2.07 ↑                  | 427. 2.52 ↓                    |
| 425 a. Same reverse die as 423, | 428. 2.01 ↓                    |
| 424. 2.36 ↓                     | 429. 2.32 ↓; 2.37 ↓            |
| b. 2.34 →                       | 430. Same reverse die as 429.  |
| c. 2.39 ↓                       | 2.47 ←                         |

*Cithara above; ΔΩ PO to l. and r.*

- |                               |                                |
|-------------------------------|--------------------------------|
| 431. 2.35 ↓; 2.51 ↑           | 438 a. 2.31 ←                  |
| 432. 2.38 ↓                   | b. 2.37 ↑                      |
| 433. 2.42 ← (PLATE XLVII)     | 439. Same reverse die as 438b. |
| 434. 2.25 →                   | 2.43 ↓                         |
| 435. Same reverse die as 434. | 440. Same reverse die as 438b, |
| 2.38 ↓                        | 439. 2.31 ←                    |
| 436. 2.41 →                   | 441. Same reverse die as 438b, |
| 437. Same reverse die as 436. | 439, 440. 2.23 ←               |
| 2.43 ↓                        |                                |

*Cithara above; ΘΟ ΚΑ to l. and r.*

442. 2.37 → (PLATE XLVII)                      b. 2.27 →  
 443. 2.34 ↑    c. 2.44 ←  
 444 a. 2.32 ↓    446. 2.37 ↑  
       b. 2.52 ←                                      447. 2.33 →  
 445 a. Same reverse die as 444 b. 448. 2.61 ←  
       2.35 →

*Cithara above; Δ ΙΟ to l. and r.*

449. 2.43 ↑

*Cithara above; Η ΡΟ to l. and r.*

450. 2.46 →; 2.42 ↓                              456. Circle of dots. 2.31 →  
 451. Circle of dots. 2.00 ←; 2.48 →          457. Circle of dots. 1.99 →  
 452. Circle of dots.                              458. Circle of dots. 2.51 →  
       a. Same reverse die as 451. 459. Circle of dots. 2.52 →  
           2.36 ↑                                      460. Circle of dots. 2.19 ↓  
       b. 2.07 ↑                                      461. Circle of dots. 2.56 →  
 453. Circle of dots. 2.64 ↓                      462. Circle of dots.  
 454. Circle of dots. Same reverse            a. 2.36 →  
       die as 453. 2.31 ↓                          b. 2.46 ←  
 455. Circle of dots.                              c. 2.07 ↓  
       a. 2.30 ←  
       b. 2.32 ←

*Cithara above; Π Υ to l. and r.; ΘΟ below*

463. Same obverse die as 462. 464. Circle of dots. 2.52 ↓ (PLATE  
       2.10 ↓    XLVIII)

*Cithara above; Π Ε to l. and r.; ΛΑ below*

465. Circle of dots. 2.36 ↓

Seven issues of Megarian money are here assigned to the early period of the Achaean League coinage.<sup>46</sup> The reasons for dividing the

<sup>46</sup> A variant of one of these issues (Clerk's 123 with Η ΡΟ to l. and r. and ΝΥ below) is dubious. The plate shows no trace of letters under the League monogram.

emissions at this point are discussed in the commentary on the first section of the coinage (pp. 87–88). Four of the strikings are large. The other three are known from very few specimens, that of ΔΙΟ from a single coin of the Agrinion Hoard, and it is probable that they were produced during relatively short periods of minting.

Issues marked ΗΡΟ and ΠΥΘΟ are joined by a transferred obverse die. The one coin of ΔΙΟ is so close in style to No. 450 of ΗΡΟ, and No. 465 of ΠΕΛΑ so close to Nos. 463–464 of ΠΥΘΟ as to establish the sequence of the last four issues. Of the first three emissions, ΘΟΚΛ would seem to belong at the end since two of its dies (Nos. 447–448) foreshadow the coarse style characteristic of the ΗΡΟ and later strikings. Recutting apparently determines the relative position of the ΜΕΓΩ and ΔΩΡΟ issues.<sup>46</sup>

The workmanship of this Megarian series is very poor. Dies are inferior in style, often clumsily executed, and there is a considerable degree of doublestriking. This probably reflects the hasty production of a bulk coinage, for it is evident that Megara struck a great deal of League money during this period. Fifty-four obverse dies are on record for 101 coins, a ratio of under two coins per die. It would be hazardous even to estimate the number of dies originally in use but it must have been a very high total.

	<i>Agrinion Hoard</i>		<i>Other</i>	
	Coins	Obverse dies	Coins	New obverse dies
ΜΕΓΩ	12	8	7	2
ΔΩΡΟ	13	11	9	1
ΘΟΚΛ	10	7	8	2
ΔΙΟ	1	1	—	—
ΗΡΟ	19	13	13	5
ΠΥΘΟ	2	2 (1 carried over)	3	2
ΠΕΛΑ	1	1	3	—

<sup>46</sup> Two reverse dies of ΘΟΚΛ (Nos. 442–443) show a recutting of letters. On the first, the *theta* seems to be a reshaped *delta*, which would provide a firm connection between Issues 2 and 3.



**Megalopolis** 13 coins (part)*Pedum above; K Δ to l. and r.; M below*

- 466 a. 2.40 ↓; 2.39 →  
 b. 2.44 ↑; 2.40 ↓; 2.44 →  
 c. 2.45 ↓

*B above; E Λ to l. and r.; M and syrinx below*

- 467 a. M above; syrinx and B c. 2.45 →  
 below. 2.44 ← (PLATE XLVIII) d. 2.42 →; 2.48 ←  
 e. Λ E to l. and r. 2.39 ←  
 b. 2.44 ←; 2.39 →

Coins from these two issues of Megalopolis show a near identity of obverse heads and a marked similarity in state of preservation. The strikings are undoubtedly contemporary. Minor variations of the syrinx issue exist but they are from the same obverse die as our 467.<sup>47</sup> It seems in fact almost certain that Megalopolis employed only two obverse dies for this coinage; including the Agrinion material, there are 18 coins of the first issue on record and 47 of the second, all from the same two dies.

**Sparta** 5 coins*ΛA above, Dioscuri caps to l. and r.; ME below*

468. Circle of dots on obverse.  
 a. 2.40 ↑; 2.38 ←; 2.38 ↓;  
 2.40 ↑  
 b. 2.40 ← (PLATE XLVIII)

Sparta struck very little early Federal silver. The five coins of the Agrinion Hoard and seven of eight other recorded specimens are from the same obverse die. A variant in Clerk (325) from the Athens Cabinet shows a club below the ME monogram but it, too, shares the die of our 468.

<sup>47</sup> BΛ above, ΛE to l. and r., M and syrinx below in the Western Greece Hoard; syrinx above, E Λ to l. and r., M over B below in the same deposit; B above, Λ E to l. and r., syrinx below in the Hermitage.

Extensive die breaks below the chin on the ANS coin with ΛΑ-EΥ establish the sequence. It would seem that Sparta marked her first League issue with ΛΑ plus a symbol or a combination of symbols. On a contiguous striking and on another of somewhat later date,<sup>49</sup> the ΛΑ alone is used. At the end of the League period the symbol of the caps of the Dioscuri again appears on the coinage.

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Our Agrinion piece is from the same obverse die as Clerk's 328 and probably from the same reverse die as his 327. On all three specimens the area above and to the left of the League monogram is very obscure.<sup>50</sup> There is, however, a well-preserved coin in the ANS Collection (PLATE XXXVIII, E)<sup>51</sup> which gives us for the first time a clear impression of the entire reverse field. The marking to the left is peculiar in that it consists of a large A, formed in part by the upper left segment of the League monogram, to which is attached the l of the upper field. Either Al in ligature or AN in monogram would seem to have been the diecutter's intention.<sup>52</sup>

Since there is no symbol on the coins, the clue to the striking authority must be provided by a letter or combination of letters. As noted above, Clerk selects the *lambda* in the lower field as the crucial letter and identifies the mint as Leontion or Lepreon. It cannot be said that this is impossible, although it might be argued that Lusi is a stronger candidate than either of the other  $\Lambda$  mints,<sup>53</sup> but there are two considerations which cast doubt on Clerk's attribution. In the first place, an identification of a mint by a single letter is very unusual in the Achaean League series.<sup>54</sup> Furthermore, it is noteworthy that it is not the *lambda* which is emphasized on the reverse but the Al or AN combination. The pronounced differences in size of the two sets of letters points to Al (AN) as the mint and  $\Lambda Y$  as a control combination.

<sup>50</sup> On No. 469 the obscurity is caused by a defacement of the coin.

<sup>51</sup> The coin is from the same reverse die as No. 469 and possibly from the same obverse as Clerk's 327. Weight 2.02 gm.  $\uparrow$

<sup>52</sup> Clerk's interpretation of the cutting in the left field as a monogram to be read  $\Delta A$  or  $\Delta P$  is not likely; the first combination would be rendered more intelligibly as  $\Delta$  and the second as  $\Delta$  or  $\Delta$ . It is barely possible that the marking is simply a *rho* with an angular loop derived in part from the line of the League monogram, but I do not think this was the intent. The excessive prolongation of the initial stroke of the letter can be logically explained only as an effort to make the two diagonals of the A equal in length. What results is a well-proportioned A, comparable in scale to the l in the upper field.

<sup>53</sup> There is Federal silver and bronze of Lusi but no evidence that Leontion or Lepreon struck either.

<sup>54</sup> All other mints used two or more letters or a monogram. The one partial exception is Messene which placed M alone on some of her issues but this was a later development. Her first striking have the ME monogram.

The possibilities are three: Aegira, Aegium and Antigoneia.<sup>55</sup> Of the two AI mints, Aegium seems the more likely. No early League coinage is known for either town, which is particularly strange in the case of Aegium, one of the centers of the Federation. At a later period both strike but Aegira consistently identifies her money by the forepart of a goat alone while Aegium uses AI or AIΓI in addition to a fulmen symbol. On some issues (Clerk, pl. II, 1-2) the AI is rendered in ligature, and on the earliest of the issues which can be definitely ascribed to Aegium (our Nos. 544-549) there is a circular legend. The arrangement of the lettering on No. 469 is not strictly circular but it does have to be read around the reverse field instead of across as is normally the case.


In style, however, the AY issue has its closest relationship with a different region. The obverse die of the ANS coin resembles some in the AN striking of Elis (for example, PLATE XXVIII, 341); the obverse of No. 469 is very similar to certain Messenian and Argive dies (PLATE XLVIII, 307, 323c, 324b). Its orientation, too, is significant. In the early period of the coinage the only mints which show Zeus heads facing left are Megalopolis with her Arcadian issues, Corone, Argos and Messene. At both Argos and Messene, as at the AY mint, there is within a single issue a change in direction: some heads left, others right. At the northern mints the heads invariably face right. These considerations would link the AY issue with the southern section of the Peloponnesus and make Antigoneia the most likely source of the coinage. That the striking was actually done at Antigoneia is less probable. The problem created by the close stylistic relationship between issues of different cities and the possibility of common workshops are discussed at some length in the commentary on the coinage as a whole (pp. 101 f.). Without going into details at this point, one might suggest that the mint of Antigoneia was closed after the brief period of concentrated coining which produced the large  $\mathfrak{A}\mathfrak{P}$ ,  $\mathfrak{C}\mathfrak{Q}$  and EY issues and that at a later date a small emission in the name of Antigoneia was struck elsewhere, perhaps at Messene.

<sup>55</sup> Alipheira, a small Arcadian town for which a single issue of Federal bronze is known, might be added to the list, assuming that  $\mathfrak{A}$  stands for  $\mathfrak{A}\mathfrak{I}$ , but it seems improbable that Alipheira would have identified her money thus imprecisely by a combination which ostensibly reads AI or AN.

No. 470 looks barbaric and is possibly a copy of the pedum issue of Megalopolis. The head is sketchily rendered and the reverse marking, except for the M below, is unintelligible.

ACHAEAN LEAGUE (LATE)  
(258 coins)

*Obv.*: Laureate head of Zeus r. Circle of dots.

*Rev.*:  with various markings in field; all in laurel wreath tied below.

*Hemidrachms*

**Megalopolis** 43 coins (part)

ΞΒ above; K A to l. and r.; M over fulmen below

- |                            |                             |
|----------------------------|-----------------------------|
| 471. No circle of dots.    | f. K to l.; M over fulmen.  |
| a. 2.35 ←; 2.35 →          | 2.32 ↓; 2.37 ←; 2.31 →      |
| b. 2.44 →; 2.40 →          | g. K to l.; ME over fulmen. |
| c. 2.44 ↓; 2.42 ↓          | 2.47 ↑; 2.43 ↓              |
| d. 2.43 ←; 2.43 →          | h. K to l.; ME over fulmen. |
| e. K to l. 2.33 ↓; 2.37 →; | 2.13 ↓                      |
| 2.40 →; 2.44 ↑             |                             |

Ξ above; K l to l. and r.; syrx below

- |  |  |
|--|--|
| 472. ΒΞ on obverse; no circle of dots. | j. 2.37 ←                              |
| a. 2.41 ↓                              | k. l K to l. and r. 2.33 ↓             |
| b. 2.37 →                              | (PLATE XLVIII); 2.38 ↑;                |
| c. 2.38 ↑                              | 2.39 ↓                                 |
| d. 2.29 ↑                              | l. l K to l. and r. 2.41 ↑             |
| e. 2.25 ↓                              | 473. ΒΞ on obverse; no circle of dots. |
| f. 2.42 ↓; 2.40 ↓                      | a. l K to l. and r. 2.48 ←;            |
| g. Uncleaned. 2.40 ←                   | 2.45 ↑; 2.43 ←                         |
| h. 2.37 ←; 2.36 ↓; 2.41 ↑;             | b. 2.36 →                              |
| 2.46 ↑; 2.40 ↓                         | 474. ΒΞ on obverse; no circle of dots. |
| i. 2.45 ←                              | 2.19 ←; 2.43 →                         |

As noted above in the discussion of the Messenian series, these strikings of Megalopolis are closely related in style and further united by the repetition of the  $\Xi B$  control combination.<sup>56</sup> Like the two earlier issues of the same mint (Nos. 466–467), they are small emissions:

	<i>Agrinion Hoard</i>		<i>Other</i>	
	Coins	Obverse dies	Coins	New obverse dies
Fulmen	18	1	48	—
Syrinx	25	3	42	—

**Elis** 43 coins (part)

*l above; F A to l. and r.; fulmen below*

- |                            |                                   |
|----------------------------|-----------------------------------|
| 475. 2.41 ↑ (PLATE XLVIII) | 477 a. Same reverse die as 476 b. |
| 476 a. 2.45 ↑              | 2.65 →                            |
| b. 2.41 →                  | b. 2.38 ↓                         |

*Σ above; F A to l. and r.; Γ over fulmen below*

- |                              |                               |
|------------------------------|-------------------------------|
| 478. <sup>57</sup> 2.44 ←    | 481 a. 2.48 ↓                 |
| 479 a. 2.44 ←                | b. 2.43 →                     |
| b. 2.46 →                    | 482. 2.44 →                   |
| c. 2.45 ←                    | 483. Same reverse die as 482. |
| 480 a. 2.33 → (PLATE XLVIII) | 2.45 ←                        |
| b. 2.48 ↓                    |                               |
| c. 2.39 ↑                    |                               |

*Σ above; F A to l. and r.; Ξ l over fulmen below*

- |   |                               |
|---|-------------------------------|
| 484. Same obverse die as 482. $\square$ l | 485. Same obverse die as 483. |
| over fulmen. 2.36 ↓                       | 2.44 ↑                        |

<sup>56</sup> Clerk gives the obverse reading as BI (see his list of corrections) and Crosby-Grace as BI but the form is  $B\Xi$  on all legible specimens.

One coin of Clerk's catalogue (No. 213) has the standard reverse of our 472–474 coupled with a head of crude style facing left. If the obverse-reverse combination is correct and if this is an official issue, it would seem to be an isolated precursor of the late Arcadian issues of Megalopolis (PLATE XLIX, J).

<sup>57</sup> A die break across the reverse field makes the letter, if any, above the fulmen uncertain.

$\Sigma$  above; F A to l. and r.; A over fulmen below

- |                                  |                         |
|----------------------------------|-------------------------|
| 486. Fulmen omitted. 2.44 ↓      | b. 2.40 ↑               |
| 487. Fulmen omitted. 2.38 ↓      | c. 2.43 →; 2.42 ←       |
| 488. Fulmen omitted. 2.42 ↑      | 491. 2.50 ↑             |
| 489 a. 2.42 ↑ (PLATE XLIX)       | 492. 2.43 →             |
| b. 2.38 →                        | 493. 2.35 ↑             |
| 490 a. Same reverse die as 489b. | 494. 2.42 →             |
| 2.43 ↑ (PLATE XLIX);             | 495 a. 2.39 ←           |
| 2.38 →; 2.42 ←; 2.34 ↑           | b. <sup>58</sup> 2.52 ↑ |

A above; F P to l. and r.; X over fulmen below<sup>59</sup>

- |                                    |                                 |
|------------------------------------|---------------------------------|
| 496. 2.44 ↑                        | 500. X above; F A to l. and r.; |
| 497. P to r. 2.45 ↑                | P over fulmen below. 2.42 ←     |
| 498. Same reverse die as 497.      | (PLATE XLIX)                    |
| 2.46 ↓                             | 501. Same reverse die as 500.   |
| 499. Same reverse die as 497, 498. | 2.43 ↓                          |
| 2.41 ↑; 2.48 ←                     |                                 |

A sharp contrast in condition and in style separates these coins from the earlier League strikings of Elis (PLATES XXVII-XXIX). Five issues are listed but it is possible that  $\Sigma$  is a single emission with three secondary controls:  $\Gamma$ ,  $\Sigma$  l, and A. The fact that the three obverse dies on record here for  $\Sigma$  l coins were used for  $\Gamma$  reverses as well proves the contemporaneity of these two  $\Sigma$  strikings.


There is a marked similarity in obverse style throughout the series with the exception of Nos. 489-495 in the  $\Sigma$ -A issue, which are clearly from a different hand or hands. They may belong at the end of the sequence but the present arrangement seems more likely in that it places the l issue with its single control before those with double markings, unites the three  $\Sigma$  strikings and brings together the two issues in which very small heads appear.

<sup>58</sup> Even allowing for the double impression, it is difficult to account for the confused state of this reverse.

<sup>59</sup> Clerk's 238 with lA above is from the same reverse die as our 497; the l is a die break. A few other corrections in Clerk's record should be noted: 230 and 240 have l above and are examples of the first issue of the present series; 234 and 235 are from the same  $\Sigma$  l striking with traces of the l after the monogram visible on the reproduction of the first coin.

	<i>Agrinion Hoard</i>		<i>Other</i>	
	Coins	Obverse dies	Coins	New obverse dies
I	5	3	8	2
Σ-Γ	11	6	6	2
Σ-Ξ I	2	2 (both carried over)	5	(1 other die carried over from Γ)
Σ-A	18	10	11	6
Π-X	7	6	8	1

☐ above; K A to l. and r.; Athena head below

Caphyae's League coinage was apparently limited to three issues: the one above, another with the monogram , and a third with Ε.<sup>60</sup> Of these, the first two have obverses of very similar style and would seem to be roughly contemporary striking; the last is a later issue, represented by one example in the Western Greece Hoard and one in Clerk. Although coins of Caphyae do not appear in the other large Achaean hoards, the first emission at least seems to have been of fair size. The Agrinion Hoard has five hemidrachms from four obverse dies and two additional obverse dies are found on the nine other recorded specimens.

<sup>60</sup> The  $\hat{\Gamma}$  of Clerk's 174 is a variant of our monogram. His 177 and a coin in the Western Greece Hoard have  $\hat{\Xi}$  beside the Athena head and a second monogram in the upper field, obscure on the hoard specimen and almost entirely off flan on Clerk's coin. No. 178 of Clerk is an issue of Dyme (see our 564-567).



**Megara** 41 coins (part)*Cithara above; ΦΙ ΛΟ to l. and r.; Ξ below*506.<sup>61</sup> 2.39 ↑*Cithara above; Δ Ι to l. and r.; ΔΟ below*

507. 2.21 ↓

508 a. 2.36 ↓

b. 2.24 ↑

*Cithara above; Η Ρ to l. and r.; Α below*

509. 2.36 ↓; 1.83 ↑

510 a. 2.31 ↑

b. 2.04 ↑

511 a. 2.31 →

b. 1.97 →

512. Same reverse die as 511b.

2.84 ←

513. 2.31 ←

514. 1.99 ↓

515. 1.95 ↓

*Cithara above; Δ Ι to l. and r.; Φ below*

516. Same obverse die as 515.

a. 2.39 ↓

b. 2.58 ↑

c. 2.51 →

517 a. Same reverse die as 516c.

2.22 ↑

b. 2.44 ←

c. 2.25 ↓

518 a. 2.46 →

b. 2.41 ↓

c. 2.24 →

519. Same reverse die as 518c.

2.41 ↑

520. 2.47 ←

*Cithara above; Μ Α to l. and r.; Τ below*

521. 2.35 ↓

522 a. Same reverse die as 521.

2.15 ↓

b. 2.28 ↓; 2.39 ←

523. Same reverse die as 522b.

2.24 ←

<sup>61</sup> Although the circle of dots is not visible on the Agrinion coin, it was part of the die for it can be seen on other coins from the same obverse stamp. On a number of Megarian hemidrachms of this period the dotted border is only faintly discernible due to poor workmanship and weak striking.

*Cithara above; ΣΩ to l. and r.; Ρ below*

- |                          |                                  |
|--------------------------|----------------------------------|
| 524. 2.19 ↑ (PLATE XLIX) | 527. 2.30 ↓                      |
| 525 a. 2.22 ↑            | 528 a. Same reverse die as 527.  |
| b. 2.21 ←                | 2.33 ←                           |
| 526 a. 2.08 →            | b. 2.54 ↑                        |
| b. 2.27 ↓                | 529. 2.28 ↑ (PLATE XLIX); 2.17 ↓ |
| c. 2.22 ↓                |                                  |

Except for the HPA and ΔΙΦ issues which are linked by a transferred die, the sequence of these six Megarian strikings is tentative. The coins show little difference in wear and the heads are generally similar in style, but those of the MAT and ΣΩΚΡΑ emissions are coarser than those of the other four series.

Two variants of the ΣΩΚΡΑ issue are given in Clerk: No. 129 with CΩ KP to left and right and No. 132 with ΣΩ Ε. Not even the cithara is certain on the obscure reverse of the first coin and the second piece is not illustrated. It is probable that its monogram has been misread.

Agrinion Hoard			Other	
	Coins	Obverse dies	Coins	New obverse dies
ΦΙΛΟΞ	1	1	4	1
ΔΙΔΟ	3	2	5	1
HPA	10	7	7	1
ΔΙΦ	11	5 (1 carried over)	9	2
MAT	5	3	4	1
ΣΩΚΡΑ	11	6	4	1

**Pheneus** 4 coins

*E Y to l. and r.; caduceus below*

- |                          |                               |
|--------------------------|-------------------------------|
| 530. 2.33 ↓ (PLATE XLIX) | 533. Same reverse die as 532. |
| 531. 2.38 ←              | 2.39 ←                        |
| 532. 2.00 ←              |                               |

The caduceus symbol identifies this EY issue as Federal silver of Pheneus. Clerk's attribution of a second issue with EY alone (his 222) to the same mint is questionable. EY is a very common control combination in the Achaean League series and there is no stylistic similarity of obverse heads to link the two striking.

Although limited to one issue, Pheneus' coinage was probably more extensive than the number of surviving specimens would suggest. Four obverse dies were used for the four Agrinion pieces and one of the two other recorded coins was struck from a fifth die.

### **Pellene**      4 coins

*ΓΕ above; Α Θ to l. and r.; chelys between Φ and Ι below*

- |   |                               |
|---|-------------------------------|
| 534. 2.20 ←   | 537. Same reverse die as 536. |
| 535. 2.65 ↑ (PLATE XLIX)                                    | 2.42 ↓                        |
| 536. ΑΘ ΦΙ to l. and r.; chelys<br>below. Uncleaned. 2.43 ↑ |                               |

Pellene, like Pheneus, seems to have struck only one issue of League silver. The four coins of the Agrinion Hoard and six recorded elsewhere are from six obverse dies. No. 90 of Clerk and two specimens from the Western Greece Hoard are described as having a vase below the Achaean monogram, but this is an error. Pellene consistently used the chelys as a symbol.

### **Epidaurus**      5 coins

*Cupping vase above; Σ Ω to l. and r.; ΔΑ below*

- |             |   |
|-------------|---|
| 538. 2.50 ↑ | 539. Same reverse die as 538.<br>2.32 ↑ |
|-------------|---|

*Snake above; Τ Ι to l. and r.; ΙΑ below*

- |                                  |  |
|----------------------------------|--|
| 540. 2.43 → (PLATE XLIX)         | 542. Snake between Ι and Α<br>above; ✕ below. 2.45 → |
| 541. ✕ below wreath ties. 2.29 ← |  |

Twenty-one entries are listed under Epidaurus by Clerk. Of these, some are doubtful<sup>62</sup> and others merely record different arrangements of the same control letters. Still other entries can be brought together on the basis of recurrent major controls.<sup>63</sup> There would seem to be only eight distinct issues with the snake symbol and two with the cupping vase. Stylistic similarities and die links provide additional evidence of contemporaneity. The issues represented by Clerk's Nos. 154 and 162 share an obverse die and another obverse is used for Nos. 156, 157, 164 and probably 160. All of this suggests a diversified coinage extending over a relatively short period.

	<i>Agrinion Hoard</i>		<i>Other</i>	
	Coins	Obverse dies	Coins	New obverse dies
Cupping vase				
ΣΩ-ΔΑ	2	2	3	2
Snake				
ΤΙ-ΙΑ	3	3	2	1

**Cleitör**      1 coin

∇ (?) above; Δ l to l. and r.; Helios head facing below

543. Head l. 2.45 ↓

Three issues are known for Cleitör, two with Helios head symbol and one with ΚΛΗ. A minimum of eight obverse dies were used for the ten coins on record.

<sup>62</sup> Nos. 170–172 are discussed under Sparta (p. 49); their attribution to Epidaurus is questionable. On No. 169, not illustrated, the ΘΑ is probably a misreading of the usual ΔΑ. No. 166, also without illustration, is very likely a poorly-preserved example of the Patras striking with ΘΕ above and dolphin below (our 560–563). The letters beneath the League monogram on No. 160 are difficult to make out; from the plate they seem to read ΙΞ.

<sup>63</sup> Nos. 156–7, from the same obverse die, with ΟΛ and ΕΥ or ΣΩ; Nos. 158 and 161, from the same obverse die, with ΣΩ (ΦΑ) and ΣΙ or ΚΛ.

**Aegium** 9 coins*Fulmen below; ethnic and KO*

(legend reads outward, counter-clockwise from r. field)

544.  $\mathfrak{A}$  on obverse. 546.  $A \mathfrak{P}$  on obverse.  $KO \Gamma I A$   
 a.  $AI \Gamma I KO$  2.18  $\downarrow$  2.45  $\leftarrow$   
 b.  $A \Gamma I KO$  (from bottom) 547.  $\mathfrak{P}$  on obverse.  $AI \Gamma I KO$   
 2.38  $\uparrow$  (PLATE XLIX) (from top) 2.40  $\uparrow$ ; 2.18  $\rightarrow$ ;  
 545.  $\mathfrak{P}$  on obverse.  $A I \Gamma I KO$  2.24  $\rightarrow$   
 2.44  $\leftarrow$

*Fulmen below; ethnic and  $\Gamma \Lambda$* 

(legend reads outward, counter-clockwise from r. field)

548.  $EY TEI$  on obverse.  $AI \Gamma I \Gamma \Lambda$  549.  $EY TEI$  on obverse.  $\Gamma I \Gamma \Gamma \Lambda$ <sup>64</sup>  
 2.44  $\uparrow$  2.43  $\leftarrow$  (PLATE XLIX)

During the late period of the League series, Aegium produced five or six issues of silver.<sup>65</sup> The first two, represented by the coins of the Agrinion Hoard, combine an abbreviated ethnic with  $KO$  or  $\Gamma \Lambda$  in a circular arrangement which is difficult to read. Obverses are marked  $\mathfrak{P}$  or  $A \mathfrak{P}$  and  $EY TEI$ . One of the  $EY TEI$  coins in Clerk (No. 40), with  $\Gamma \Lambda$  above and  $AI \Gamma I$  to left and right, seems to mark the transition from the peculiar circular legend to the conventional arrangement.

The next two or three issues have  $AI$  above and various combinations to left, right and below:  $O-TEI$ ,  $\Lambda E-\Delta I$ , and possibly  $A-\Delta$ . A final issue has  $AI \Gamma I \epsilon \omega N$  in full on the obverse and  $APICTO \Delta AMOC$  on the reverse.

The two Agrinion strikings are close in style and condition. They are earlier than the other issues but the interval between is probably not extensive.

<sup>64</sup> In this blundered legend the  $\Gamma A$  may be a mistake for  $\Gamma \Lambda$ .

<sup>65</sup> The only uncertain entries in Clerk's list are his 36, an example of the  $KO$  issue with  $\Xi E$  on the obverse in addition to the usual  $A \mathfrak{P}$ , and 34 with  $AI$  above and  $A \Delta$  to left and right. There is no illustration of the second piece and the reproduction of the first shows no trace of the  $\Xi E$ .

<i>Agrinion Hoard</i>			<i>Other</i>	
	Coins	Obverse dies	Coins	New obverse dies
KO	7	4	9	2
ΓΛ	2	2	8	2

**Patras** 20 coins (part)

*Dolphin to r. above; A Π to l. and r.*

550 a. 2.40 ↑  
b. 2.47 ↓

551. 2.42 ↑  
552. 2.38 ↑

*TEI above; A N to l. and r.; dolphin to l. below*

553 a. 2.43 ↓  
b. 2.43 ← (PLATE XLIX)

*A above; Ξ E to l. and r.; dolphin to l. below*

554 a. 2.35 ← (PLATE XLIX)  
b. 2.45 →

557. Same reverse die as 556 b.  
2.41 →

555. 2.37 ↑

558. 2.43 ↑

556 a. 2.42 ↓  
b. 2.43 ←

559. Same reverse die as 558.  
2.41 ↑

*Θ E above; Ξ E to l. and r.; dolphin to l. below*

560. Same obverse die as 559.  
a. 2.33 →  
b. 2.40 ↓; 2.39 →

561. Same reverse die as 560 b.  
2.42 ↑  
562. 2.32 ←  
563. 2.36 ←

The two ΞE strikings of Patras are joined by a common obverse die and the AN-TEI issue must be contemporary to judge from the condition of the coins and the similarity of the Zeus heads. In the AΠ issue the obverses are executed in higher relief and in somewhat heavier style and the reverses have a single control combination and the symbol above instead of below. These differences may indicate a break in the sequence after the first issue but there is no reason to suppose that it was of long duration.

	<i>Agrinion Hoard</i>		<i>Other</i>	
	Coins	Obverse dies	Coins	New obverse dies
ΑΠ	4	3	4	1
ΑΝ-ΤΕΙ	2	1	3	2
ΞΕ-Α	8	6	2	—
ΞΕ-ΘΕ	6	4 (1 carried over)	10	—

**Dyme** 6 coins

*ΔΥ above; Ε Ν to l. and r.; Athena head below*

- |                                 |                                 |
|---------------------------------|---------------------------------|
| 564. 2.34 ↓; 2.39 ←             | 566. Same reverse die as 565 b. |
| 565 a. Same reverse die as 564. | 2.46 ↓ (PLATE XLIX)             |
| 2.44 →                          | 567. Same reverse die as 565 b. |
| b. 2.46 →                       | 566. 2.41 ←                     |

This issue is given to Caphyae by Clerk (No. 178), presumably because its reverse dies have the same symbol as those of the Arcadian mint. There are, however, distinct differences in the two coinages, differences in the rendering of the Athena head, in obverse style and in lettering. The three issues of Caphyae are clearly identified by the first two letters of the ethnic, KA, in the field to left and right. The present issue has EN in the same position and ΔΥ above. Were it not for the symbol, the obvious attribution would be to Dyme.

It is the evidence of the obverse dies that seems conclusive. On PLATE XLIII coins of the Athena head – ΔΥ issue are shown with coins of Patras. The similarity in style of the Zeus heads is striking. Even more decisive is the close stylistic relationship between the obverses of our Nos. 564–567 and that of a coin in Clerk (No. 56, pl. III, 6) which is clearly the first fish issue of Dyme.<sup>66</sup> The Athena head – ΔΥ striking, linked as it is in style with issues of Dyme and of the neighboring mint of Patras, must be just what it says it is, the coinage of Dyme. It is the ΔΥ and not the Athena head which is significant.

<sup>66</sup> The workmanship of both obverse and reverse is definitely superior to that of the other issues of Dyme reproduced on Clerk's plate.

Dyme apparently began her League silver at about the same time as Caphyae (p. 93). Both mints chose an Athena head as the symbol for their coins. Since the first letters of their respective ethnics were also placed on the dies, there should have been no confusion as to the issuing authority, but for some reason the duplication of device proved undesirable. After one emission Dyme replaced the Athena head with the fish, a coin type of her earlier autonomous money.

<i>Agrinion Hoard</i>		<i>Other</i>	
Coins	Obverse dies	Coins	New obverse dies
6	4	4	1

**Aegira** 28 coins

*Forepart of goat to r. above;  $\begin{smallmatrix} \Gamma & \Lambda \\ A & Y \end{smallmatrix}$  to l. and r.*

- 568 a.  $\Gamma\Lambda AY$  to l. and r. 2.42 ← 569. 2.52 ↓  
 b. 1.88 → 570. 2.43 ←

*Forepart of goat to r. above;  $A\Lambda KI$  to l. and r.*

571. Same obverse die as 569. c. 2.55 ↓; 2.49 ↑  
 a. 2.30 ↓ d. 2.34 ←  
 b.  $\begin{smallmatrix} A & \Lambda \\ K & I \end{smallmatrix}$  to l. and r. 2.14 ←; e. 2.28 ↓  
 2.32 ↑ f. 2.36 ↓  
 c.  $\begin{smallmatrix} A & \Lambda \\ K & I \end{smallmatrix}$  to l. and r. 2.59 ↑; 573 a. 2.43 →  
 2.55 → b. 2.18 ←  
 d.  $\begin{smallmatrix} A & \Lambda \\ K & I \end{smallmatrix}$  to l. and r. 2.45 ↓ 574. 2.22 ← (PLATE XLIX)  
 572. Same obverse die as 570. 575 a. 2.20 ←  
 a. Same reverse die as 571 d. b. 2.46 ←; 2.34 ↑  
 2.39 ↓ 576. Same reverse die as 575 b.  
 b.  $\begin{smallmatrix} A & \Lambda \\ K & I \end{smallmatrix}$  to l. and r. 2.16 ↓; 2.19 ↓  
 2.29 ↑

*Forepart of goat to r. above;  $\Xi E$  (downward) to l.*

577. 2.26 →



*Forepart of goat to r. above; Λ A to l. and r.*

578. 2.42 → (PLATE XLIX)

Issues of ΓΛAY and ΑΛΚΙ are united by two transferred obverse dies with the sequence established by die breaks.<sup>67</sup> The two other striking of the Agrinion Hoard and some ten or eleven issues known from different sources<sup>68</sup> complete the record of the League silver of Aegira. Die linkage<sup>69</sup> and a homogeneity of style within this later series bring a number of issues into close relationship and point to a coinage of comparatively short duration.

	<i>Agrinion Hoard</i>		<i>Other</i>	
	Coins	Obverse dies	Coins	New obverse dies
ΓΛAY	4	3	14	3
ΑΛΚΙ	22	6 (2 carried over)	17	—
ΞΕ	1	1	3	2
ΛΑ	1	1	1	—

**Corinth** 11 coins (part)

*Pegasus r. over Π above*  
(wreaths tied above)

579. Head l.

a. 2.44 ← (PLATE XLIX)

b. 2.44 ↑

c. 2.38 ↑

580. Head l. 2.41 →

581. Head l. K upper r. on reverse.

2.34 →

582. Head l. 2.43 ↑

<sup>67</sup> A break just behind the forelock can be seen clearly on 571b but not on 569; one extending out from the bridge of the nose is visible on 572a but not present on 570.

<sup>68</sup> From the plate Clerk's 24 seems to have the same reading as our 577 and may be from the same reverse die. His 26 and 27 have the same inscription: ΝΙ. Coins in the ANS and Copenhagen Cabinets provide a more complete version of the name, ΝΙΚΟ (Ξ), and add two issues to Clerk's list: ΦΙ ΛΟ (ANS) and Χ ΑΙ (Copenhagen).

<sup>69</sup> The ΛΑ, ΗΑΡ, ΗΓΝΩ and ΑΡ striking are connected by common dies.

*Pegasus r. over K above; A Σ to l. and r.*  
(wreaths tied to l.)

583. Same obverse die as 582. 585. Head l. Same reverse die as  
2.36 ↓ 584a. 2.37 ←  
584. Head l.  
a. 2.45 ↑  
b. 2.29 ↓; 2.46 ↑

There is a considerable interval between the *koppa* emission of Corinth (Nos. 240–242) and these die-linked strikings.<sup>70</sup> Like other mints, Corinth produced an early and a late League coinage in silver, limited in this case to the three issues of the Agrinion Hoard.<sup>71</sup>

<i>Agrinion Hoard</i>		<i>Other</i>	
Coins	Obverse dies	Coins	New obverse dies
⌘ 6	4	8	—
KAΣ 5	3 (1 carried over)	9	3

**Sicyon** 25 coins (part)

*ME above; N I to l. and r.; dove r. below*  
(wreaths tied above)

- 586 a. 2.36 ← 588 a. Same reverse die as 587a.  
b. 2.45 ← 2.45 ↑; 2.44 →  
c. 2.45 ← (PLATE XLIX) b. 2.44 ↑  
587 a. 2.39 → 589. Same reverse die as 588b.  
b. 2.48 ← 2.45 ↑; 2.41 ←  
590. 2.49 →

<sup>70</sup> The die of 582 is breaking down badly by the time it is used for the KAΣ coin.

<sup>71</sup> Clerk's 112 with Pegasus and *koppa* is from the same reverse die as our 581. The marking seems to be a poorly-cut *kappa* rather than a *koppa*.

$\Delta$  I above; N I to l. and r.; dove r. below  
(wreaths tied above)

591. Same obverse die as 589. 593. Same reverse die as 591,  
2.56 → 592 a. 2.48 →  
592. Same obverse die as 590. 594 a. Same reverse die as 592 b.  
a. Same reverse die as 591. 2.42 ↓  
2.45 ↓ b. 2.41 ↓  
b. 2.40 ↓ c. 2.46 ↑  
d. 2.43 →

$\Delta$  above; N I to l. and r.; dove r. below  
(wreath tied above)

595. Same obverse die as 594.  
2.47 →

$\Delta$  above;  $\Delta$  E to l. and r.; dove r. below  
(wreaths tied above)

596. 2.44 ← (PLATE XLIX) 598. 2.53 ↓  
597. Same reverse die as 596.  
2.46 →

$\Delta$  above; M to r.; dove r. below  
(wreath tied above)

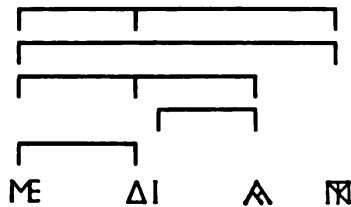
599. 2.39 ↑

$\Delta$  above;  $\Delta$  to l.; dove r. below  
(wreath tied above)

600. 2.43 →

The pattern of coinage at Sicyon is very similar to that at Corinth, one early and two late issues, but a basic difference in mint organization is revealed by the coins of this second period. Whereas the

Corinthian striking use a single control combination ( $\text{KA}\Sigma$ ), those of Sicyon employ both principal and secondary controls: NI with ME,  $\Delta$ I,  $\text{A}$  or  $\text{N}$ ;  $\text{KA}$  with  $\Delta$ E, M (or  $\text{M}$ ),  $\text{P}$  and variants,  $\text{A}\Gamma$ , EI or  $\text{K}$ .<sup>72</sup> Many of these secondary controls are linked by transferred obverse dies. For the NI issue, where our record of obverse dies would seem to be nearly complete, the linkage is comprehensive:



Within the  $\text{KA}$  issue there are fewer connections<sup>73</sup> but the low ratio of known coins and dies for this striking implies that our record is fragmentary.

It seems clear that the late Sicyonian coinage comprised two distinct issues with an elaborate system of minor controls. That these controls were more or less contemporaneous and not spaced over any extensive interval is attested by the pattern of die linkage and by the hoard evidence. The 25 coins of the Agrinion Hoard are not only similar in style but closely comparable in condition.

	<i>Agrinion Hoard</i>		<i>Other</i>	
	Coins	Obverse dies	Coins	New obverse dies
NI	20	7	17	—
$\text{KA}$	5	5	16	7

<sup>72</sup> Again some corrections in Clerk's list can be noted. From the plate his 91 reads  $\text{A}\Gamma$  and not  $\text{A}\text{T}$  to l. and r. Both 98 and 99 have  $\text{N}\text{I}$  to l. and r.; a die break is responsible for what seems to be a monogram on the first coin. No. 100 is almost certainly another example of our 595. No. 105 conceivably has the ME-NI combination but one cannot be sure in the absence of illustration. For the same reason it is impossible to check No. 106 with  $\Sigma$  above and dove below. No. 107 with  $\Sigma$  I to l. and r. and dove flying left below is rendered in very crude style. If not barbaric, it represents a final late issue of the Sicyonian mint.

<sup>73</sup> I have noted only three:  $\Delta$ E and EI, M and  $\text{K}$ , AP and M.

**Argos** 10 coins (part)

*Club above;  $\mathfrak{R}$  to r.  
(wreaths tied above)*

601.<sup>74</sup> 2.35 ↑

602 a. 2.41 ↑; 2.39 →

b. 2.44 ↑ (PLATE XLIX)

603 a. 2.47 ↑

b. Same reverse die as 602 b.

2.43 ←; 2.34 ↑

604. 2.42 →; 2.45 ←

605. 2.47 ↑

The late coinage of Argos combines a club symbol with the  $\mathfrak{R}$  monogram of earlier emissions (Nos. 301–306 and 308).<sup>75</sup> Twenty coins, ten from the Agrinion Hoard and the same number from other sources, provide a total of six obverse dies, apparently the work of a single engraver.

**Messene** 3 coins (part)

*M to l.; E above;  $\Sigma$  to r.*

606. 2.30 ↑

*Tripod between  $\mathfrak{E}$  and M above;  $\text{I}\Sigma$   $\mathfrak{X}$  to l. and r.*

607. 2.44 ↑

608. 2.45 ↑

<sup>74</sup> The circle of dots is not visible on this obverse.

<sup>75</sup> Clerk lists under Argos three entries with club and different markings. No. 143a is not illustrated but is described as having  $\mathfrak{A}$  in the right field. This is probably nothing more than a misreading of the standard monogram on a poorly-preserved coin. Nos. 145 and 146 are more difficult to explain. The first has  $\mathfrak{A}$  to left and club below. It may form part of the present issue, despite its dissimilar obverse style, in which case there is a repetition of the formula of an earlier Argive issue in which the symbol is combined with more than one control mark (our 307 and 308). No. 146 with  $\mathfrak{M}$  or  $\mathfrak{ME}$  above and a club below is a much cruder piece. It may represent a token contribution by Argos to the final output of League silver. Both coins have the wreath tied below instead of above, but this is probably not significant since No. 308 of the hoard also deviates from standard Argive practice.

## MESSENE

(2 coins)

*Obv.*: Laureate head of Zeus r. Border of dots.*Rev.*: MEΣ in laurel wreath.*Hemidrachms*

609 a. 2.27 ←

b. 2.43 →

Nos. 607–8 represent an issue which has been assigned to Sicyon by Weil (*ZfN* 1882, 248 f.), to Messene (?) by Poole (*BMC Pelop.*, 7) and to Hermione by Clerk and Crosby-Grace. Of these, the Hermione attribution seems the least plausible. The tripod symbol has no connection with that mint and the Ε monogram is only one of four combinations of letters placed on the reverse dies.<sup>76</sup> Sicyon did use the tripod on her autonomous money but it would be very difficult to bring our tripod issue into any reasonable relationship with the homogeneous sequence of dove issues produced by Sicyon in the later Achaean League period. Poole's Messenian assignment is almost certainly correct. Nos. 607–8 are similar in style to the earlier League strikings of Messene (Nos. 325–329) and very close to later issues with MEΣ (Nos. 606 and 609 on PLATE XLVI). Although the tripod symbol does not appear on any other Federal coins of Messene, it is prominently featured on her autonomous silver and bronze from the fourth century down to Imperial times.

The Agrinion Hoard provides two specimens of an autonomous issue which is apparently unpublished (Nos. 609a and b). Except for the absence of the League monogram, this striking is closely comparable to No. 606 and a common obverse die establishes the contemporaneity of the two issues.<sup>77</sup>

The output of late Messenian silver would seem to have consisted of League and autonomous issues with MEΣ, one League issue with

<sup>76</sup> Furthermore it is not given a position of prominence as is usually the case with letters or monograms indicating the mints. There is indeed a possibility that the two monograms flanking the tripod should be read together as a name beginning EPMA...

<sup>77</sup> A hemidrachm in the Paris Cabinet (PLATE XLVI, F; 2.36 gm. ↑) is from the same obverse die as Nos. 609a and b.

tripod symbol, and finally a series of autonomous hemidrachms with tripod type and MEΣ legend, alone or combined with magistrates' names (*BMC Pelop.*, pl. XXII, 8–9). Many of these last are of poor style and inferior workmanship.<sup>78</sup>

<i>Agrinion Hoard</i>			<i>Other</i>	
	Coins	Obverse dies	Coins	New obverse dies
MEΣ	1	1	10	1 (used for autonomous silver with MEΣ)
Tripod	2	2	5	4
MEΣ (autonomous)	2	1	—	—

### AETOLIA (97 coins)

*Obv.*: Head of Aetolia r., wearing kausia.

*Rev.*: ΑΙΤΩΛΩΝ above Calydonian boar r.; spear-head in exergue.

#### *Hemidrachms*

Δ below boar

610. ΦΙ on obverse. 2.52 ←

K below boar; A in exergue

611 a. 2.36 →; 2.38 ←

b. 2.36 ←

612. 2.36 →

613 a. 2.46 ←

b. 2.47 ↑

c. 2.25 ←

614. Same reverse die as 613c.

2.46 ←

<sup>78</sup> The names of only four magistrates are found on the material I have examined, suggesting a short period of emission.

$\Lambda Y$  below boar; A in exergue<sup>79</sup>

615. 2.42 ↓

$\mathbb{A}$  below boar;  $\Delta I$  in exergue

616. 2.38 →; 2.31 ↓; 2.49 ↓

619.<sup>80</sup> Same reverse die as 618.

617. 2.25 ↑; 2.34 →

2.40 →

618. 2.41 ←; 2.42 →

620. 2.31 ←

$\Xi$  below boar;  $\Delta I$  in exergue

621. 2.44 ↑

$\Upsilon$  below boar;  $\mathcal{R}$  in exergue

622. 2.47 ↑; 2.37 ↑

$\Phi$  below boar;  $\mathcal{R}$  in exergue

623. 2.44 ↑

624. 2.34 ↑

$\mathcal{R} \Sigma$  below boar

625. 2.51 ↑

627 a. Same reverse die as 625,

626. Same reverse die as 625.

626. 2.25 →

2.40 ↑

b. 2.40 ←

KO  $\Sigma$  below boar

628. 2.58 ↑; 2.57 ↑

B  $\Sigma$  below boar

629. 2.43 →

$\mathcal{A}/ \Sigma$  below boar

630. 2.43 ↑

631. 2.47 ↑

<sup>79</sup> The A is off flan on the Agrinion coin. Its presence on the die is attested by a Paris specimen.

<sup>80</sup> Upon rechecking, this coin proves to be from the same *pair* of dies as the two preceding entries and is, therefore, a third example of No. 618. The correction does not seem important enough to necessitate the rearrangement of the catalogue and plates.



$\Sigma$  behind boar;  $\overline{\square}$  below

632. 2.50 →

633. Same reverse die as 632.

2.35 →

 $\mathcal{R}$  between hind legs of boar;  $\Sigma$  below

634. 2.41 ←

 $\mathcal{R}$  between hind legs of boar;  $\Sigma$  below

635. 2.41 ↓

637. 2.57 ↓

636. 2.37 ↓

638. 2.43 ↓

 $\Sigma$   $\mathcal{K}$  below boar639.  $\Sigma$  on obverse.  $\mathcal{K}$  below boar. 642. 2.49 →

2.30 ↓

643.  $\Sigma$  on obverse.640.  $\Sigma$  on obverse.  $\mathcal{K}$  below boar.

a. 2.46 ↑

2.28 ↑

b. 2.45 ↑

641.  $\mathcal{K}$   $\Sigma$  below boar. 2.38 ↑ $\Lambda Y$   $\Sigma$  below boar

644. 2.41 ↓

 $\times$   $\Sigma$  below boar

645. 2.41 →

 $\mathcal{B}\mathcal{K}$   $\Sigma$  below boar

646. 2.46 →

 $\mathcal{A}$   $\Sigma$  below boar647. Same obverse die as 646.<sup>81</sup>

2.42 ↓

<sup>81</sup> A die break above the kausia establishes the order of Nos. 646–647. The same obverse die is combined with  $\overline{\square}$   $\Sigma$  on a coin in the Munich Collection.

Λ Σ below boar

648. a. 2.41 ↓  
b. 2.44 ↑

▣ Σ below boar

649. Same obverse die as 648.<sup>82</sup>  
2.45 ↑

TI Σ below boar

650. 2.52 ↑ a. 2.44 ↑  
651. Possibly same obverse die as b. 2.33 ↑  
641. 652. 2.42 ←; 2.34 ←

⊞ Σ below boar

653. 2.42 →; 2.45 ← 655. 2.44 ←  
654. 2.42 ↓

⊞ Σ below boar

656. Same obverse die as 655. 657. Same obverse die as 652.  
2.49 ↑ a. 2.50 →  
b. 2.49 ←

⊞ Σ below boar

658. Same obverse die as 654. 660. Same obverse die as 655,  
2.43 → 656. 2.44 →  
659. Same obverse die as 657. 661. Same reverse die as 660.  
Same reverse die as 658. 2.44 ↓  
2.42 ↓

□ ΔΣ below boar

662. Same obverse die as 655,  
656, 660. 2.44 ↓

<sup>82</sup> Die breaks in the region of the neck establish the order of Nos. 648–649. The obverse die is also combined with TI Σ.

Λ  
club ΔΣ below boar

663. Same obverse die as 653.  
2.41 →

Λ<sup>83</sup> ΔΣ below boar

664. Same obverse die as 661.  
2.39 →

ΔAMO ΔΣ below boar

665. Same obverse die as 661,  
664.<sup>84</sup> 2.44 ↑

Α ΔΣ below boar

666. 1.95 ←

667. 2.35 ←

ONΛ below boar; ΣΩ<sup>85</sup> in exergue

668. 2.45 ←

ΣΩKΛΕ below boar

669. 2.50 ↓

ΔΙΩ Ε below boar

670. 2.42 ←; 2.19 →

671 a. 2.40 ↓  
b. 2.50 ←

Κ Ε below boar

672. 2.45 →; 2.39 ↑

<sup>83</sup> The form of the monogram may be  $\overline{\Lambda}$  but what seems to be a horizontal stroke is probably the remains of an earlier monogram.

<sup>84</sup> No. 665 is the last stage of the die.

<sup>85</sup> On the Agrinion coin the Ω is off flan. An Oxford hemidrachm provides the complete reading.

ΔΩΡ Ε below boar

- |             |               |
|-------------|---------------|
| 673. 2.41 ← | 676 a. 2.43 ↓ |
| 674. 2.59 ↓ | b. 2.39 ↑     |
| 675. 2.44 → |               |

ΑΕ ΕΥ below boar

677. Same obverse die as 676. 678. 2.40 ↑  
2.42 ←

Α ΕΥ below boar

679. 2.35 ↓; 2.39 ←; 2.35 ↓; 2.47 ↑;  
2.42 →; 2.46 ←; 2.40 →

ROMAN REPUBLIC  
(39 coins)

*Obv.*: Helmeted head of Roma r.; X to l.  
*Rev.*: ROMA Dioscuri riding r.  
*Denarii*

680. Anonymous. 3.56 ←  
681. CN.DO 3.01 ←

*Rev.*: ROMA Victory in biga r.

682. NAT 3.77 ↑  
683. L.SA V 3.61 ←  
684. Similar. 3.44 ↓  
685. P.S V A 3.30 ↑  
686. Similar. 3.86 ←  
687. NAT A 3.69 ←  
688. Similar. 3.59 ↓  
689. FLAVS 4.04 ↑  
690. Similar. 3.63 →

*Rev.*: ROMA Dioscuri riding r.

691. Cornucopiae to l. and X to r. of head. L.CV<sup>o</sup> 3.41 →

692. C. AESTI to l. and X to r. of head. Dog below Dioscuri. 4.12 ↓

693. Similar. 3.49 →

*Rev.*: ROMA Juno Caprotina in biga of goats r.

694. C.RENI 3.71 ↓

695. Similar. 3.62 ↑

696. Similar. 3.79 ←

697. Similar. 3.90 ↑

698. Same reverse die as 697. 3.92 ↓

699. Similar. 3.85 ←

*Rev.*: ROMA Diana in biga r.

700. A.SP<sup>o</sup>VI 3.76 ↓

*Rev.*: ROMA Dioscuri riding r.

701. Π. ΠAETVS 4.09 →

*Rev.*: ROMA Apollo in quadriga r.

702. Head l.; X to l. and TAMPIL to r. M. BAEBI.Q.F on reverse. 3.91 ↓

*Rev.*: ROMA Dioscuri riding r.

703. TRIO to l. and X to r. of head. CN.LVCR 3.71 ←

*Rev.*: ROMA Jupiter in quadriga r.

704. GRAG to l. and ✕ to r. of head. L.AES 3.99 →

705. Similar. 4.13 ↑

706. Similar. 3.94 ↑

707. Similar. 3.83 ↓

708. Similar. Uncleaned. 3.85 ↑

*Rev.*: Dioscuri riding in opposite directions.

709. Wreath to l. and ✱ ROMA below head. C.SERVEILI.M.F. Uncleaned. 3.66 ↓  
710. Similar. 3.79 ↓



*Rev.*: ROMA Jupiter in quadriga r.

711. L. REBAVI 3.92 ←



*Rev.*: ROMA Column with togate figure to either side.

712. ✱ to l. of head. TI.MINVCI.C.F.AVGVRINI 3.82 ↓  
713. Similar. 3.96 ↑

*Rev.*: ROMA Victory in quadriga r.

714. ✱ to l. of head. P.    
a. 3.83 →  
b. 3.92 ↓

*Rev.*: ROMA Sol in quadriga r.

715. GEM to l. and ✱ to r. of head. M.   3.76 ↑

*Rev.*: ROMA Apollo in biga r.

716. Tripod to l. and ✱ to r. of head. M.OPEIMI 3.91 →

*Rev.*: ROMA Horseman r.; behind, helmet.

717. ✱ to l. of head. Q.PILIPVS 3.80 ↑

## COMMENTARY

### THE EARLY COINAGES

(Nos. 1-156, 161)

About twelve per cent of the Agrinion coins antedate the burial of the hoard by several centuries. The oldest piece, a hemidrachm of Phocis (No. 134) belongs to the fifth century; all other coins of this first group are fourth century striking, with the possible exception of some Argive issues and the Aeginetan drachm (No. 161) which may be slightly later. The same high proportion of early coinage is found in other hoards of the period, notably in those of Olympia, Arcadia and Western Greece.<sup>86</sup> A fifth hoard, that of Caserta, has comparatively little early material. All five deposits, moreover, show a striking similarity in composition. In each case the bulk of the early coinage derives from the mints of Chalcis, Sicyon, Argos, Locris and Boeotia. Coins of Histiaea, Phocis, Aenianes, Lamia, Oeta and Aegina are included in more than one find. The Olympia Hoard has a single hemidrachm of Thessalian Thebes. No other mint of Greece proper is represented.

Since the Agrinion Hoard is the first deposit of the second century B.C. to be discovered in Aetolia,<sup>87</sup> its evidence for monetary circulation in that area is of considerable importance, and it is interesting to note how consistent the pattern is on both sides of the Corinthian Gulf. Down to the beginning of the second century, in Aetolia and in the Peloponnesus alike, the need for fractional silver was apparently satisfied by the fourth century drachms and hemidrachms of a limited number of mints in Central and Southern Greece. After that date, these early coins continued to circulate as a supplement to the new Federal issues. Why other fourth century coinages are missing from

<sup>86</sup> Arcadia has about the same percentage as Agrinion, Western Greece better than sixteen per cent, Olympia a very substantial proportion.

<sup>87</sup> To the best of my knowledge the only other Aetolian finds are those of Naupactus (S.P. Noe, *NNM* 78, Nos. 731, 732) which are earlier.

the hoards and why there is little, if any, third century money are problems not easily answered.<sup>88</sup> Where are the coins of Elis,<sup>89</sup> Athens, Alexander? They appear in Peloponnesian hoards of earlier date.<sup>90</sup> Is their absence from the second century deposits purely fortuitous or does it indicate that they never circulated in the region in anything like the abundance of the issues represented in the hoards?

A few individual coins are noteworthy. Nos. 59 and 60 with their common obverse die establish the contiguity of the Chalcidian issues with bucranium and rose symbols. No. 145 is remarkable for its state of preservation. Despite its age, this fourth century hemidrachm shows little evidence of wear and serves as a reminder of the hazards of basing chronological conclusions on the condition of one or two hoard coins. Another well preserved example of an early striking is the drachm of Aegina, No. 161. This Aeginetan issue with two pellets or globules on the reverse is of special interest for it alone appears in the Achaean League hoards. The Olympia Hoard has four specimens, Arcadia and Agrinion one apiece. Since this is not the latest issue of Aeginetan silver,<sup>91</sup> it is difficult to understand why it should be the only one present in the hoards.

<sup>88</sup> Until definitive studies of the autonomous Argive and Sicyonian series have been made, it is impossible to divide the issues with magistrates' names between the late third and the second centuries. Most of the strikings included in the Caserta and Western Greece Hoards, and to a lesser extent in that of Olympia, probably belong to the second century.

It was formerly thought that the small change of the third century was largely composed of hemidrachms of the Achaean and Aetolian Leagues. Very few of the issues, however, can be dated before 200 B.C. (pp. 89–90, 106). The great bulk of the Federal money comes from the second century, which makes the scarcity of autonomous issues in the hoards all the more puzzling.

<sup>89</sup> A single hemidrachm of Elis of the third century is in the Olympia Hoard.

<sup>90</sup> Epidaurus, Olympia 1922 and Sophikon (Noe 392, 754, 997).

<sup>91</sup> On the evidence of fabric and hoard contents, it comes before the series with AI, AIΓ or AIΓI. This inscribed group is discussed by E. T. Newell in his publications of the Andritsaena and Olympia 1922 Hoards (*NNM* 21, 31–37 and *NNM* 39, 16–17) where he suggests that the minting of Aeginetan silver staters did not stop in 348 B.C. but was resumed at a later date with Macedonian sanction. It is possible that the issue with globules has also been dated too early.



## THE THESSALIAN AND BOEOTIAN LEAGUES

(Nos. 157-160)

Both coinages are dated 196-146 B.C. in the standard catalogues. There is not enough material in the Agrinion Hoard for anything more than a few general observations on chronology. The Thessalian coin with ΠΟΛΥ is very worn and may be assumed to have been struck in the early years of the Federation. Of the four Boeotian drachms, the first is also poorly preserved and the second shows considerable wear while the other two, from a common obverse die and with a common symbol, are of later style and in excellent condition. They are, in fact, among the best preserved coins of the Agrinion Hoard. Although the testimony of so few specimens cannot be regarded as conclusive, it suggests at least that a considerable interval, perhaps as much as a half century, separates Nos. 158 and 160 and that the trident pieces belong to the final period of Boeotian League coinage.

## ATHENS

(Nos. 162-197)

The Athenian material includes an almost unbroken sequence of issues, beginning in 190/89 B.C. and ending in 169/8. Two coins from the slightly later striking of 165/4 and 162/1 are also present. As a group these tetradrachms show a considerable degree of wear, attesting a fairly long period of circulation. This evidence of extensive use is the more reliable for being supported by a substantial number of specimens. More than half of the issues are represented by at least two coins and some by four or five. Eleven tetradrachms, about one-third of the lot, belong to the five years between 173/2 and 169/8 and are thus near enough in time to be considered contemporary striking. As one can readily see from the illustrations (Nos. 186-195 on PLATES XII-XIV), they are closely comparable in condition. Long handling has smoothed over the contact areas of obverses and reverses, obscuring or obliterating the amphora letters, the feathers of the owls and the details of the helmets.

Nos. 196 and 197 are in a far better state of preservation, so much better in fact that they would seem to be separated from the earlier

issues by more than four and seven years. It is, however, well-nigh impossible to break the succession of emissions for this section of the Athenian coinage. Die links and stylistic considerations determine the order from Miki-Theophras through Theophras-Sotas, and Glau-Eche is related to Miki-Theophras on the evidence of the Salonika Hoard. Furthermore, the material of the Salonika Hoard and the late strikings of the Kessab Hoard cover roughly the same period as the last four issues of Agrinion, 170/69–163/2, and the condition of the coins of those deposits is compatible with their chronological range.<sup>92</sup> One must assume that the preservation of Nos. 196–197 is the result of an abnormal pattern of circulation, as in the case of No. 145 of Locris and No. 161 of Aegina. A possible explanation may be found in considering the relationship of this Athenian money with historical events in Aetolia.

In a recent article Luis A. Losada<sup>93</sup> discusses the reason for the presence of a substantial number of New Style tetradrachms in Aetolia, as indicated by the contents of the Agrinion Hoard. He concludes that the influx of Attic money reflects the terms of the treaty imposed by Rome in 189 B.C. compelling Aetolia to pay 200 talents immediately and 50 talents per annum for the next six years, this indemnity to be in coinage of Attic weight and quality.<sup>94</sup> Since Aetolia produced no coins of Attic standard during the second century and is unlikely to have had a reserve of third century tetradrachms sufficient to meet the Roman demands,<sup>95</sup> the only solution would have been to obtain foreign currency. The obvious source was Athens.

On several occasions Athens had interceded with Rome on behalf of Aetolia and the terms of the treaty of 189, hard as they were, might have been even more stringent had it not been for the pleading of an

<sup>92</sup> See *Athens*, 307–309 and 475–477 for the sequence and hoards.

<sup>93</sup> "The Aetolian Indemnity of 189 and the Agrinion Hoard," *Phoenix* 1965, 129–133.

<sup>94</sup> Polybius 21.32.8

<sup>95</sup> During the second half of the third century Aetolia did strike tetradrachms on the Attic standard. Only seven obverse dies are known and there is considerable die-linking of issues, indicating a very small coinage of limited duration. The wear on coins in hoards from Corinth and elsewhere places their emission within the period 230–215 B.C. (Losada, 130; Noe, "The Corinth Hoard of 1938," *ANSMN* 10 [1962], 30–31). It is improbable that these tetradrachms would have been available in quantity in 189 B.C.

Athenian envoy.<sup>96</sup> Clearly the relationship between the two Greek states was a close and friendly one; turning to Athens for help in meeting the payments to Rome would have been the natural course for Aetolia to take. The Athenian coins of the Agrinion Hoard indicate that aid was provided.

Losada makes the interesting suggestion that the wording of the peace treaty, which practically calls for payment in Athenian tetradrachms, was a deliberate move on Rome's part to reward Athens for support in the war with Antiochus<sup>97</sup> and also to orient Aetolia's economy toward Athens and away from Macedon. The policy seems to have been successful for Athenian tetradrachms continued to flow in quantity into Aetolia until the end of the Third Macedonian War.

After Pydna Aetolia had no political or economic importance. Her own fractional silver all but stopped and there would have been no need and no resources for the importation of larger denominations from Athens or anywhere else. What large coins did come into the region were probably brought by returning mercenaries. One assumes that they were valued highly at a time when new tetradrachms were in short supply. The condition of the two latest Athenian pieces and those of Cyme testifies to long hoarding before final burial.

### CYME

(No. 198)

The exact date of this coin is uncertain but it was very likely struck in the late 160's or early 150's. In style, fabric and general composition the Cymeian series of spread-flan tetradrachms is closely related to issues from the nearby mints of Aegae, Myrina and Magnesia. The strikings are undoubtedly contemporary.

Coins of this group are not present in the large Latakia Hoard of 1759 buried ca. 165 B.C. They are common in seven Syrian hoards,

<sup>96</sup> Polybius 21.31.6-16.

<sup>97</sup> As Losada points out, Athens no doubt profited handsomely from her business transactions with Aetolia, which could scarcely have failed to stimulate the Athenian economy. Indeed it is possible that the size of the early New Style coinage (*Athens*, 713-714) is in part explained by the Aetolian indemnity payments.

some published and others recorded by Henri Seyrig, which were interred ca. 150–140 B.C. on the evidence of dated Seleucid material.<sup>98</sup> Of these the Haiffa Hoard is the most significant for it is partially illustrated in the Dupriez Sale of December 12, 1906. The find included 12 coins of Myrina with nine different monograms, 3 of Magnesia with three magistrates, and 14 of Cyme with four magistrates. All are classified in the catalogue as good or very good and the plates bear out the estimates of condition for the illustrated pieces. The latest coin is a tetradrachm of Demetrius II dated 146/5, which led Regling (*ZfN* 1928, 95) to place the burial ca. 145–140 B.C.

Since tetradrachms of this type seem to have made their first appearance in Syria after 165 but before 150 and since a number of specimens turned up in the Haiffa Hoard of ca. 145–140 in uniformly good state of preservation, a reasonable date for the coinage would be ca. 165–155 B.C., allowing time for the various emissions to travel to Syria and to acquire a degree of wear in the course of their circulation. In this connection it should be noted that the Agrinion example with the name of Metrophanes is closely comparable in condition to the one Metrophanes coin illustrated by Dupriez; it has experienced some but not extensive handling.<sup>99</sup>

No. 198 and its elusive companion piece reached Aetolia after Pydna. In the absence of any historical link between Aetolia and Asia Minor at that time, it is probable that they, like the two late Athenian tetradrachms, came in with discharged mercenaries.

## MEGALOPOLIS

(Nos. 199–239)

It has been evident for some time that the Arcadian-type coinage, here assigned to Megalopolis, belongs to the second rather than the third century and hence cannot be connected with the Arcadian League. This was pointed out by Crosby and Grace in their public-

<sup>98</sup> The published deposits are those of Latakia (Noe 603), Haiffa (Noe 475) and Zahle (*Athens*, 523). Suggested burial dates are those of Seyrig.

<sup>99</sup> The same is likely true of the tetradrachm which disappeared just after the hoard was discovered. At least it is hard to believe that a man selecting one coin to keep or sell would pick anything but a fine, perhaps the finest, specimen.

ation of a small hoard from Arcadia<sup>100</sup> and by the writer in a study of a similar find from Western Greece.<sup>101</sup> In both hoards the condition of the "Arcadian" coins could not be reconciled with the early date of the standard catalogues. More recently James A. Dengate has made a die study of over 700 examples of the series and has come to definite conclusions about their sequence and chronology.<sup>102</sup>

The style and wear of the various Agrinion strikings support Dengate's general arrangement: issues with no eagle on the knee of Pan, issues with eagle and miscellaneous controls, four linked issues with eagle and  $\Delta\Lambda$  or  $\Delta$  as the control marking, issues with eagle but no controls, and finally issues with eagle and miscellaneous controls supplemented by the inscription ΜΕΓ. These last strikings are not in the Agrinion Hoard. The presence of the ethnic on the one group of emissions provides proof of the origin of the earlier issues with identical types.

Of the 151 "Arcadian" coins of Agrinion, 103 come from the linked issues with  $\Delta\Lambda$  or  $\Delta$  as a control. Twenty-two obverse dies are represented and the pattern of transfers is significant. Die breaks (p. 19, note 17) establish the position of  $\text{P}-\Delta$  after  $\text{P}-\Delta\Lambda$  and of  $\Lambda-\Delta$  after  $\text{P}-\Delta$ .

They also place  $\Lambda-\Delta$  after  $\text{P}-\Delta\Lambda$  which means that  $\Lambda-\Delta$  and  $\text{P}-\Delta$  are strictly contemporary strikings. As Dengate suggests, the strong probability is that all four issues with their extensive die linking were put out at roughly the same time. Some indication that  $\text{P}-\Delta\Lambda$  and  $\Lambda-\Delta$  continued to be struck longer than the other emissions is to be found in the style of Obverses 217-220 of those issues. They are very different from the other obverses of the linked group but quite similar in treatment to the obverses of the issue without controls.

Certain dies of the "Arcadian" series are close in style to obverses of the Achaean League coinage. These relationships with their chronological implications are discussed in the commentary on the Achaean section of the hoard.

<sup>100</sup> *NNM* 74, 6-12.

<sup>101</sup> *Hesperia* 1939, 142-144.

<sup>102</sup> "The Triobols of Megalopolis," *ANSMN* 13 (1967), 57-110.

THE ACHAEAN LEAGUE

(Nos. 240–608)

One of the major contributions of the Agrinion Hoard is the evidence it provides for the chronology and character of the Achaean League coinage. No other deposit of its kind, with the exception of the enormous Zougra Hoard, makes as much material available.<sup>103</sup> In addition to the 834 hemidrachms of Agrinion, 985 specimens from other hoards and public collections have been included, for purposes of comparison, in the present analysis. This is a substantial body of coinage but it falls far short of a corpus and die study of the League issues. Until such a study has been made, any theories and conclusions based on the partial record must be regarded as tentative. Their chief value lies in indicating significant points of departure for future research.

The evolution of the Achaean series is analogous to that of other large Hellenistic coinages. Obverse and reverse types remain constant but there is an increasingly extensive use of adjunct markings. The earliest issues are anepigraphic or inscribed with a single letter in the reverse field.<sup>104</sup> Later reverses indicate the minting authority by a symbol or an abbreviated ethnic and also include a single or double control in the form of one or two letters or a monogram. Lettering appears very occasionally on the obverses. The final stages of the coinage are marked by a complicated system of primary and secondary controls, by more specific designation of the mints and by the common occurrence of letters or full names on the obverses.

We are not concerned here with the anepigraphic issues. They seem to have been small emissions produced over a limited period,<sup>105</sup> but in the absence of a die study, there is no firm foundation for an

<sup>103</sup> The Zougra Hoard (Noe 1186) is unpublished. Other hoards already cited contain smaller quantities of Achaean money: Caserta 322, Olympia 633, Western Greece 429 and Arcadia 152.


<sup>104</sup> Examples of this coinage are illustrated by Clerk (pl. I, 1–3).





<sup>105</sup> Not many coins are known but the few specimens checked show a fair amount of die duplication. Two of Clerk's three coins are from the same obverse die, as is the one London hemidrachm (*BMC Pelop.*, pl. I, 1) and one of four ANS coins. A single specimen in Copenhagen (*SNG* 227) is from Clerk's second die. The three other ANS pieces are from three different dies.

evaluation of their size and chronological span. They do not appear in the Agrinion Hoard, which comprises only issues bearing mint and control markings. It is this body of material which has been divided into early and late groups.

Before attempting to determine how early and how late the coins are, it will be well to consider the nature of the coinage as a whole. One important feature is immediately apparent: this is not a regular sequence of annual issues but a coinage with clearly-defined points of concentration.

The first section of the catalogue consists of 576 hemidrachms which on the evidence of style and wear are earlier than the other coins. Every known early issue of what may be called the civic coinage, to distinguish it from the anepigraphic issues, is represented.<sup>106</sup> Eleven mints are active but their output varies considerably. Corinth, Sicyon, Corone and Sparta strike single emissions; Elis, Patras, Messene and Megara produce five to seven issues. Many are contemporaneous on the evidence of die links and close stylistic parallels. Antigoneia, for example, contributes more coins (185) and more obverse dies (68) to the Agrinion Hoard than any other mint, but the coins all belong to three die-linked issues. This is the entire Achaean coinage of Antigoneia unless No. 469 of the catalogue represents a small, later striking of that mint. Furthermore, there are instances of stylistic similarities between the issues of different mints, which imply chronological proximity and help to establish the overall pattern of the coinage. These relationships can best be brought out by taking the issues in what seems to be their chronological order, with references to PLATES XLVII-XLVIII where stylistic comparisons are illustrated.<sup>107</sup>

A very early, and perhaps the first, Achaean issue with clear indication of minting authority is the  striking of Corinth. Its obverses are of good style and rather similar to those of the anepigraphic series (PLATE XLVII, G, in the Berlin Cabinet [2.56 gm. ↓],

<sup>106</sup> The only possible exception is the  and harpa coinage of Argos if this is a separate issue and not, as seems likely, part of an issue which has the harpa as primary control and ,  and  as subsidiary marks (p. 29).

<sup>107</sup> Data on die linkage and the sequence of issues at individual mints are given in the commentaries throughout the catalogue.

and 241a). The wreaths of some reverses are tied above, which again relates the issue to the anepigraphic coinage. There are only three obverse dies on record and even allowing for missing material, the issue cannot have been a large one.

At about the time Corinth is putting out the  $\text{AP}$  emission, Sicyon, Patras and Argos are striking. The earliest hoard coins of those mints show a great deal of wear and the wreaths of the reverses are consistently tied at the top. Obverses of Sicyon and Patras (PLATE XLVII, 244a, 255b) are related in style: small heads in high relief with short locks and beards. Those of Argos face left instead of right and are in a quite different stylistic tradition: large heads with a loose rendering of long hair and beards. It seems likely that the Argive style derives from the early Arcadian issues of Megalopolis (PLATE XLVII, 204a, 302a).

The single issue of Corone has obverses similar to those of Argos, as does the first issue of Messene (PLATE XLVII, 311a, 313a) and one notes that the same control combination ( $\Xi\text{E}$ ) is found on coins of both Messenian mints. Meanwhile in the north Corinth and Sicyon have stopped striking, but Patras continues and Elis puts out an initial issue very close in style to the third issue of Patras (PLATE XLVII, 270b, 331a).

The next section of the early coinage seems to consist of two issues of Elis, three of Antigoneia and possibly one each of Patras and Megara. The obverses of the  $\text{C}\Omega$ (CIAN) emission of Elis are extremely close to some dies of the Antigoneia sequence (PLATE XLVII, 335, 360b), so close in fact that a common place of minting, or at least a common diecutter, is probable. The one obverse of the  $\Phi\text{I}$  issue of Elis is also linked by style with other obverses of Antigoneia (PLATE XLVII, 336, 388, 406a). Clearly there was a strong bond between the two mints. To this period, or to the beginning of the next, may be assigned the  $\text{ME}\Gamma\Omega$  coins of Megara and the  $\text{M}-\Delta\text{I}$  coins of Patras, which have a certain stylistic similarity (PLATE XLVII, 424, 273a).

In its final stages the early coinage shows greater diversity. Messene resumes minting with the  $\Pi\Delta$ ,  $\text{A}\Pi$ ,  $\text{N}\Phi$ ,  $\Xi\text{E}-\text{OP}$  and  $\times$  emissions, a sequence linked by transferred dies and style. Striking resemblances exist between the obverses of the  $\Phi$ - $\text{N}\Phi$  issue of Messene and those of several other coinages: the two very small issues of Megalopolis with



pedum and syrinx symbols, the coins of Argos with harpa and  $\text{I}\Omega$  or  $\text{A}$ , and the  $\text{A}\Upsilon$  issue of Antigoneia (?); while the  $\Xi\text{E-OP}$  coins of Messene and the harpa- $\text{F}$  coins of Argos have obverse dies which are almost identical despite the different orientation of the heads (PLATE XLVIII, 321, 467a, H[ANS., 2.47 ↑], 307, 323c, 469, 308, 324b).

Six issues of Megara probably belong to this period. Individual heads of the  $\Delta\Omega\text{PO}$  and  $\Theta\text{OKA}$  issues are similar to some found in the large  $\Delta\text{I}$  issue of Patras (PLATE XLVII, 433, 291d, 282b, 442). The  $\text{AN}$  issue of Elis is linked stylistically with the Arcadian sequence of Megalopolis with  $\Delta\text{A}$  and  $\Delta$  controls (PLATE XLVII, 232a, 341d, 210b). Late dies of Megara, Patras and Megalopolis (Arcadian issues) are comparable in the coarseness of their execution (PLATE XLVIII, 217a, 237, 449, 294, 295, 464). Nos. 217a and 464 show a certain resemblance to Nos. 308 and 324b of Argos and Messene. At the end of the period one encounters the small neat heads of some of the  $\text{X}$  coins of Messene, the die-linked issues of Elis and Patras and the  $\text{ME}$  striking of Sparta, the first emission of that mint (PLATE XLVIII, 328c, 468b, 345f, 299b, 347a, 300f). These are the final issues of the early sequence. After their striking there is a definite break in the coinage; issues of many of the same mints are represented in the second part of the catalogue but the coins are of quite different style and in better condition than these earlier pieces.

A noteworthy feature of the last section of the Early Period is the circle of dots framing the obverse heads and although it cannot be assumed that the change occurred at all mints at exactly the same time, it is a criterion for relative chronology. Dotted obverses are found on three striking of Megara, on two of Messene and on single emissions of Patras, Elis, Argos and Sparta. The Arcadian coins have no dots but in this case there can be no chronological significance for Megalopolis never employs the convention. Even her late Arcadian issues with  $\text{ME}\Gamma$  have undotted obverses.

The tabulation on pp. 116–117 summarizes the data of the preceding paragraphs. Solid lines represent die links, broken lines show stylistic relationships within and between coinages. The number of known obverse dies, in parentheses after each issue, gives some indication of the size of the individual issues and of the activity of the various

mints at various periods.<sup>108</sup> A vertical arrow below an issue or group of issues means that emission may have extended over some time to judge from the size and stylistic heterogeneity of the coinage.

The chronology of this Early Period, as indicated in the tabulation, depends on the history of Elis and Messene and to a limited extent on hoard evidence. In 192–191 B.C. the Achaeans, who had supported the winning side in the struggle of Rome against Antiochus and Aetolia, were able to incorporate Sparta, Messene and Elis into their League.<sup>109</sup> Sparta was from the beginning a recalcitrant member and a source of trouble until her formal reunion with the League in 182. Messene was not enthusiastic about her new status but there is no record of overt hostility until the revolt of 183 which led to the invasion of Messene by the League. Elis apparently was willing to join the Federation and created no difficulties.

It was only after 191 that these three states could have struck Achaean League issues. It is highly unlikely that Sparta availed herself of the opportunity for some time. Messene and Elis may have been more amenable to providing financial support for the League but it is doubtful that they struck immediately after their admission. The crucial point is that they did not do so before 191 B.C. at the earliest. In the Agrinion Hoard there are no League coins which look more worn than those of the first issues of Elis and Messene, and there are none which are earlier in style, with the possible exception of the Corinthian pieces. One cannot, of course, equate condition to the year but it seems almost certain that the first civic coins of the League and the first issues of Elis and Messene are close in time. The early strikings of Patras, Sicyon, Argos and Corone on the one hand and those of Elis and Messene on the other are too homogeneous in style and condition to be separated by more than a decade at the outside.

If these observations are valid, the entire body of Achaean League coinage with mint markings was produced during the second century;

<sup>108</sup> The record of obverse dies in the tabulation does not take into account those carried over from one issue to another but the number involved is small and does not significantly affect the picture.

<sup>109</sup> The historical background in the pages that follow is based on the accounts of Livy, Pausanias, Plutarch and Polybius. Since the events and dates are for the most part familiar ones, citations of chapter and verse are infrequent. When they do occur they refer to the Loeb editions.

there was no League money of the third century except the scanty anepigraphic issues. A more precise date for the inception of the civic series can be suggested with reference to the events of the 190's. The Achaean League had in 198 joined the Roman alliance against Philip V, despite the disapproval of some member states: delegates of Dyme, Megalopolis and Argos walked out before the vote was taken and Argos in particular was sympathetic to Macedon. The decision proved a wise one, for the Roman victory at Cynoscephalae, followed by Flamininus' proclamation of the freedom of the Greek cities, marked the beginning of a period of consolidation and expansion for the Achaean League. Corinth was set free in 196 and handed over to the Achaeans. In 195 Argos, which had been threatened with "liberation" by Sparta, was rescued by Rome and reunited to the League. Sparta, Messene and Elis were added in 192-191 and at about the same time Megara, which had earlier entered the Boeotian League of necessity and with the consent of the Achaeans, expressed a desire to rejoin the Achaean Federation. Corone may have been admitted even before the annexation of Messene and she would have been a particularly welcome member because of her strategically-located port.<sup>110</sup>

It is possible that the new League coinage started on a small scale as early as 195, after the freeing of Corinth and Argos, but it seems more likely that the bulk of it represents a war coinage, put out to pay the Achaean troops who fought against Antiochus and Aetolia in 192-189. Achaean money was provided by Corinth, Sicyon, Patras, Argos and possibly Corone, while Megalopolis made a distinctive contribution in the form of Arcadian hemidrachms. Single small issues were struck by Messene and Elis a few years after their incorporation in the League.

There seems to have been some coinage in the 180's, possibly to be connected with Spartan unrest and the invasion of Messene by the League, but the next mass output is to be dated somewhat later and most plausibly associated with the Third Macedonian War. The issues of 175-168 in the tabulation of the coinage form a tightly-knit group of strikings related by die linkage, style and condition in hoards. Within individual issues there is evidence of the simultaneous employment of diecutters of varying ability, an indication of hasty

<sup>110</sup> Pausanias (4.34) says that Corone was called "the harbor of the Achaeans."

production over a limited period. Everything suggests a concentrated and extensive coinage. We know that the Achaeans sent 1,000 troops to Chalcis in 172. What further contributions of men and money they made is uncertain, but in 169/8 the League voted to send its entire military levy to Thessaly and was disposed to respond favorably to an appeal for 5,000 soldiers to serve in Epirus. These measures were not carried through but the fact that they were seriously contemplated would have been sufficient reason for striking the large coinage necessary to implement them.

Two hoards are ostensibly relevant for the chronology of the Early Period: the Arcadia Hoard published by M. Crosby and E. Grace (*NNM* 74) and the Oreus Hoard published by Svoronos (*JIAN* 1902, 318–328). The burial of the first is put ca. 185–182 B.C., a date which depends on the interpretation of the Federal coinage of Elis as a long series of annual issues filling the period between 191 and the dissolution of the Federation in 146 B.C. Under the assumption that the seven issues of Elis in the hoard, plus two early issues not included, represents the first strikings of that mint, the deposit would have been interred in the late 180's. If the date were firm, the Arcadia Hoard would provide an important record of the Achaean coinage before 182 B.C., but unfortunately the basic premise of its chronology is shaky. If Elis struck a regular sequence of annual issues, she was the only League mint which did so, and when one analyzes the Elean coinage as a body, it is evident that it is not a continuous series of annual emissions but a coinage concentrated at certain periods. As we shall see later, many of the strikings which are classified as separate issues are in reality sections of the same issue differentiated by secondary controls. A very great deal of the coinage belongs to the last years of the Federation and is surely money minted in preparation for and during the war with Rome. It is quite impossible that all the Elis issues in the Arcadia Hoard, much less all its other Achaean coins, were struck before 182 B.C. If the Arcadia Hoard is an intact find, its burial is probably twenty to twenty-five years later than the date proposed in the publication. A more serious consideration involves its integrity. A European numismatist, who was present when the coins were offered for sale, has expressed doubts that the material escaped adulteration while it was being marketed,

and this possibility makes its evidence suspect. Under the circumstances one cannot safely base chronological conclusions on the contents of the Arcadia Hoard.

The Oreus Hoard is more reliable but it, too, has its elements of uncertainty. Originally it was a very large deposit of some 1300 silver coins, of which about half disappeared before the material was seen and published by Svoronos. Nine tetradrachms and one didrachm of Perseus in excellent condition are the latest coins on record and since these date from the earlier years of Perseus' reign, Mamroth in his study of the coinage of Perseus<sup>111</sup> places the Oreus burial ca. 173 B.C. In a more recent publication P. R. Franke<sup>112</sup> argues that later issues of Perseus may have been among the lost coins and that Svoronos' burial date of ca. 171 is more plausible from the historical point of view since it connects the interment with the attack by Perseus on the Roman fleet lying at anchor near Oreus.<sup>113</sup> An even later burial, ca. 169 B.C., seems not beyond possibility for it was then, according to Livy,<sup>114</sup> that Marcus Figulus brought a part of the Roman navy to Oreus to use the city as a base for forwarding supplies to the armies in Macedonia and Thessaly. If Svoronos is justified in his interpretation of the Oreus Hoard as money brought into the region at the time of Perseus' victory in late autumn 171 and turned over to a pro-Macedonian citizen, the actual burial may well have taken place a few years later when anyone with Macedonian sympathies must have viewed with alarm the return of the Roman fleet. In any case a burial date ca. 171–169 B.C. is probable for the Oreus Hoard.

It contained three hemidrachms of the Achaean League: single coins of Patras, Antigoneia and Megalopolis.<sup>115</sup> These and associated issues must antedate 171–169. There is no evaluation of the condition of the three Achaean coins and the Megalopolis piece is the

<sup>111</sup> "Die Silbermünzen des Königs Perseus," *ZfN* 1928, 6, note 2.

<sup>112</sup> "Zur Finanzpolitik des makedonischen Königs Perseus während des Krieges mit Rom 171–168 v. Chr.," *Jahr. f. Num.* 1957, 35 and 39.

<sup>113</sup> Plutarch, *Aem. Paul.* 9.

<sup>114</sup> Livy 44.13.11.

<sup>115</sup> Although Svoronos' descriptions are faulty, the issues are almost certainly the following: ⲕ–Ⲣ and trident (Patras), ⲀⲢ–ⲈⲢ (Antigoneia) and ⲕ–ⲁ–ⲙ and pedum (Megalopolis). It is the last, and not the Antigoneia coin, which appears on Svoronos' plate (XI, 4).

only one illustrated. From Svoronos' plate it seems to be in good state of preservation. The issue to which it belongs is placed, on the evidence of stylistic parallels, toward the beginning of the third section of the early coinage, some years before the issues with small heads and dotted obverses which are clearly the last striking of the 175–168 period. The chronological arrangement of the tabulation derives some support from the Oreus Hoard but since a single coin is involved, its testimony cannot be considered weighty.

More mints are represented in the coinage of the Late Period but they contribute fewer coins to the Agrinion Hoard. Again one notes stylistic parallels between the issues of different mints, indicating a measure of contemporaneity. The two small emissions of Megalopolis are from four dies, undoubtedly cut by the same hand, and the nervous style of the large heads in very low relief is strikingly similar to that on dies used for the first issue of Elis (PLATES XXXVIII–XXXIX and PLATE XLVIII, 472 k, 475). The coins of Caphyae and those of the next Elean issue are in the same tradition and show almost identical representations of the Zeus heads (PLATE XLVIII, 480a, 503 b). Smaller heads of somewhat similar type bring together issues of Patras, Dyme and Aegira (PLATE XLIX, 553 b, 566, 544 a, 574).

Megara at this period produces a series of six issues, of which the first four are close in style and at one point linked by a transferred obverse. The last two emissions have coarser heads, similar to some in the Elis series (PLATE XLIX, 500, 529, 490a, 524). Issues of Pheneus, Pellene, Epidaurus and Aegium are related to these late coins of Elis and Megara by the careless and sketchy rendering of the crude heads (PLATE XLIX, 489a, 530, 490a, 524, 535, 540, 544 b, 549).

Another group of late dies is of better workmanship. Individual heads of Aegira and Sicyon are stylistically close (PLATE XLIX, 578, 586c) while other dies of Sicyon are related to those of Argos and Corinth by a delicacy of delineation, particularly noticeable in the treatment of the features and the beards (PLATE XLIX, 596, 602 b, 579a). The single coin of Cleitor and the few dies of Messene do not fit into any of the above stylistic sequences but they seem to belong to this period of the coinage.

The last section of the tabulation (page 117) shows the stylistic relationships within and between mints and makes it apparent that we are dealing with a coinage of moderate size and considerable diversity but of rather limited duration. These issues, however, are not the last of the Achaean League series and before attempting to fix their chronology, it will be well to take a look at what follows.

In contrast to the record for the Early Period, there are numerous issues of the Late Period missing from the Agrinion Hoard. This is not to say that they are invariably of later date, for chance and other factors are always involved in the composition of a hoard. Three mints are not represented at all: Tegea, Pallantium and Lusi. A single hemidrachm is known for the last town while Tegea and Pallantium struck only three or four issues apiece. In style most, if not all, of this material seems to belong to the period of the final issues of Agrinion. The same is true of the issues of Epidaurus absent from Agrinion, and other striking will almost certainly be found to be roughly contemporary when a definitive study of the coinage has been made.

One large body of material is indubitably later than the Agrinion issues. This consists of extensive coinages from Sparta, Elis, Dyme, Patras and Megalopolis, supplemented by a less abundant output from Aegira and Aegium and perhaps by isolated issues from three or four other mints. Leaving aside the MEΓ coins of Megalopolis, which have been dealt with by Dengate (*ANSMN* 13 [1967], 57-110), and some of the minor coinages, let us consider the pattern at the four mints producing the largest amount of very late Achaean money.

The striking of Dyme, Patras and Sparta are obviously contemporary on the evidence of condition in several hoards and of the remarkable similarity of their degenerate heads.<sup>116</sup> Clerk's list includes some twelve entries for Dyme, eighteen for Patras and ten for Sparta. If these are annual issues, the coinage of the three mints would cover ten to eighteen years, but analysis of the entries gives a quite different picture. What we have is a pattern of coining similar to that established for Sicyon (p. 67) in which the issue is designated by a single primary and a varying number of secondary controls. At

<sup>116</sup> Clerk's pls. III and IV for Dyme and Patras, XII and XIII for Sparta.

Patras the emissions of the Agrinion Hoard are followed by four distinct issues with diverse subsidiary controls:

ΞΕ with Ρ, ΦΙ or ΣΩ  
 Α with ΕΥ, ΑΧ or ΓΑ  
 ΔΡ with Ϻ  
 Φ with ΧΡ or ΛΕ

Dyme seems to have produced the same number of very late issues:

Ε with ΑΛ  
 ΑΡ or Α with Φ  
 Ρ with Τ or ΧΡ  
 Χ with ΡΚ

At Sparta the data point to a single issue. All coins have Α above the League monogram, combined with seven subsidiary controls: ΠΥ, ΘΕ, Ϻ, Α, Ω, ΕΥ, Χ.

The latest coinage of Elis is considerably more complicated. Clerk lists thirty-nine entries but again this does not mean thirty-nine separate issues. Nos. 274–275 are identical except that the obverse head faces left on one coin and right on the other. Nos. 255–256 are described as having different monograms in the upper field but the plate shows that the marking is in reality the same. Nos. 252 and 254 have the same combination of monograms. Nos. 273 and 275 are from the same reverse die; the control in the upper field is in one instance given as ϣ and in the other as Φ. Other misreadings due to die breaks, careless diecutting or the poor condition of the coins almost certainly exist. One suspects that 248 and 261 have the same monogram in the upper field and that 262, 264, 265 and 293 are identically inscribed, but 248 and 293 are not illustrated and the area above the League monogram is obscure on both 262 and 265. A comprehensive study of the League silver of Elis will surely make a substantial reduction in Clerk's list.<sup>117</sup>

For the moment the important fact is that the remaining entries, like those of Sparta, Dyme and Patras, can be grouped on the basis of primary and secondary controls. There are perhaps ten or eleven

<sup>117</sup> Some of the corrections noted here and additional suggestions for revision are to be found in Crosby-Grace, *NNM* 74, 35 f.



primary marks, of which the most common (✠ and ✡) are combined with five or six subsidiary monograms, while others are coupled with only one or two. This is still a substantial number of issues but far less than one would assume from a cursory glance at Clerk's catalogue.

How much time should be equated with an issue is highly uncertain. The strikings have none of the earmarks of a regularly spaced coinage. Individual issues include dies of fairly good and extremely bad style. The work of a single diecutter can often be traced through a series of issues, side by side with the output of other engravers linking still other issues. The lettering of the obverses introduces further confusion. On the coins of the large ✠ issue one finds five monograms or names behind the Zeus heads: Α, ΚΞ, ΚΑΛΛΙΠΠΟΣ, ΘΡΑΚΥΛΕΩΝ, ΑΠΟΛΛΩΝΙΟΣ. The Caserta Hoard contains 75 examples of these issues, of which 72 are classified as in good condition; there is little difference in wear among the specimens of the same strikings in the Western Greece Hoard. In all of this there is the strong implication of a mass coinage put out over a relatively short period. It seems very likely that these late degenerate emissions of Patras, Elis, Sparta and Dyme, as well as the ΜΕΓ issues of Megalopolis, represent for the most part the money which supported the war against Rome and that they may be assigned to the last, turbulent years of the League's existence ca. 151-146 B.C.

The sequence at Aegium is helpful in relating the latest Agrinion coins to the still later issues discussed in the preceding pages. Five or six emissions seem to comprise the entire Achaean coinage of Aegium:

1. (Ρ and ΑΡ on obverse) ΑΙΓΙ with ΚΟ (Agrinion 544-547)
2. (ΕΥ ΤΕΙ on obverse) ΑΙΓΙ with ΓΛ (Agrinion 548-549 and Clerk 40<sup>118</sup> with variant arrangement of the reverse lettering)
3. ΑΙ with Ο-ΤΕΙ (Clerk 30)
4. ΑΙ with Α-Ε and ΔΙ (Clerk 29)
5. ΑΙ with Α-Δ (Clerk 34 but the coin is not illustrated and the reading which would establish this as a separate issue cannot be verified).
6. (ΑΙΓΙΕΩΝ on obverse) ΑΡΙCΤΟΔΑΜΟC (Clerk 44-45)

<sup>118</sup> Clerk's readings have in a few cases been corrected from his plates.

The three obverse styles of these issues can be seen on PLATE XLIX (549, L and M from the ANS Collection, 2.41 gm. ← and 2.28 gm. ↑). Issues 3 and 4 have heads very similar in rendering to some found on the latest issues of Patras, Dyme and Sparta, of which one example is illustrated (PLATE XLIX, K from the ANS Collection, 2.39 gm. ↑). They are later than the heads of the two Agrinion issues (1 and 2 above) but not much cruder and there is the possibility of a link between the two groups in the repetition of the TEI control.<sup>119</sup> The Aristodamos striking is unquestionably the last of the Aegium series, as is evident from the full name of the mint on the obverse and the excellent condition of the coins in the Caserta Hoard. As Löbbecke points out, this issue, represented by 63 specimens in the hoard, must be considered one of the last emissions of the League. It is interesting to note that its obverses resemble those of the last Agrinion issues of Sicyon, Argos and Corinth in the tightness of the modelling: the compact heads in low relief with carefully-defined wreaths and hair, the beady treatment of the beards and the evenly-spaced border of small dots. A somewhat similar rendering is found on a few of the late Megalopolis coins with MEΓ (PLATE XLIX, J from the ANS Collection, 2.32 gm. →). Although the issues of the Late Period of Agrinion include none of the League's final striking (with the possible exception of the issues of Sicyon, Argos and Corinth), some at least are fairly close in time to the terminal emissions. A general dating of 160–150 B.C. is likely for the group as a whole.

From the literary sources one gets the impression that the period between Pydna and 150 B.C. was a comparatively peaceful one for the League, marred only by border disputes between member states. There is no specific reference to concerted military activity, which might have required a war coinage. Yet two passages in Pausanias seem to imply that the historical record is faulty and that during this period the Achaeans made at least two forays into Central Greece to annex towns under Aetolian control and influence. In 164 B.C. a Roman emissary, C. Sulpicius Gallus, heard the petition of the people

<sup>119</sup> The EY TEI on the obverses may be a single name or a combination. It is perhaps indicative that in the issue immediately preceding some obverses are inscribed A Ϙ, implying a double control. On some dies there is a division of the EY TEI legend with EY behind the head and TEI in front.

of Pleuron for separation from the Achaean League (Paus. 7.11). Some years later, in 147 B.C., L. Aurelius Orestes was sent to Greece with instructions to detach certain important communities from the Achaean League, among them Heracleia by Mt. Oeta (Paus. 7.14). The incorporation of Pleuron must have taken place between 167 and 164; the addition of Heracleia can be set after 155/4 since a decree of that year is dated by local magistrates.<sup>120</sup> It probably occurred before 150, for after that date the League was too deeply involved in preparations for war, first with Sparta and later with Rome, to have embarked on a program of territorial aggrandizement so far from home terrain.

The circumstances under which Pleuron and Heracleia were annexed remain conjectural but it is in the highest degree unlikely that either town joined the League of its own volition. Pleuron's plea for separation in 164 and Heracleia's alacrity in heeding Rome's call for secession in 147 strongly suggest forced membership, and one wonders if this could have been accomplished without a show of military power. In the case of Pleuron this need have been little more than a token force, for in the years immediately after Pydna Aetolia was too weak to put up any effective resistance. An expedition to Heracleia some ten to fifteen years later would have been a different matter. One assumes that a substantial body of troops would have been required to insure the success of the incursion into remote and unfriendly territory, and it is not impossible that Aetolia offered armed resistance to Achaean aggression. The late Achaean League money of the Agrinion Hoard may well have moved north with the men who annexed Heracleia between 155 and 150 B.C.

The problems of the Achaean League series cannot be solved by the evidence of one deposit, or even a group of deposits, but the Agrinion Hoard does point up considerations and possibilities which will be worth testing against a larger body of material. Even this preliminary survey establishes several important facts about the League's fiscal policy. The uniform currency described by Polybius (2.37.10-11) was obviously not intended to replace the autonomous money of member cities. Megalopolis put out exactly four Federal

<sup>120</sup> G. Daux, *Delphes au III<sup>e</sup> et au I<sup>er</sup> siècle*, 327, note 3.

emissions of very small size during the period when she was producing a vast quantity of coins with the old Arcadian types. Sparta, Argos, Corone, Messene, Sicyon and probably other mints as well continued to strike autonomous silver while they were associated with the League and in some cases the civic coinages were more extensive than the Federal. Furthermore, the League does not seem to have demanded of its members any systematic contribution toward administrative expenses. One supposes that these existed but there is no evidence of regular payments into a League exchequer. On the contrary the coinage consists of concentrated emissions in which a varying number of mints participate for varying lengths of time and to varying extents. For the most part, minting activity seems to be related to military activity, and it is surely pertinent that the hemidrachm apparently represented the basic daily wage of a Hellenistic soldier.<sup>121</sup>

With reference to the tabulation on page 116, one notes an interesting pattern of distribution during the pre-Pydna period. Eleven mints are productive but not simultaneously. In the northeastern sector of the Peloponnesus, Corinth and Sicyon strike briefly and are then supplanted by Megara as the chief mint of the area. Patras is active throughout most of the period as is Elis after her incorporation in the League. In Arcadia there is a shifting back and forth between the two large cities: first Megalopolis with an Arcadian sequence, then Antigoneia with very heavy Federal issues, followed by Megalopolis again with a scanty striking of Federal coins and a series of large Arcadian issues. Sparta contributes nothing until the end of the period and Argos only two rather small issues at the beginning and the end. In the Messenian area an Achaean mint may have opened first at Corone and then been transferred to Messene after she became a member state. The bulk of the money of the 195–188 period is

<sup>121</sup> References to rates of pay have been assembled and discussed by G. T. Griffith, *The Mercenaries of the Hellenistic World* (Cambridge, 1935), 294–307. Two texts are of particular relevance. The earlier, ca. 383 B.C., is the mention in Xenophon (*Hell.* 5.2.21) of an Aeginetan triobol per day per man as the amount to be paid by cities of the Peloponnesian League contributing money instead of soldiers. In 218 B.C., according to Polybius (5.1.11 sqq.; 2.11), the Achaeans agreed to pay seventeen talents a month in wages to Philip's army of 7200, or roughly three obols a day for each soldier.

seemingly supplied by northern mints, notably Patras. Ca. 188–180 it comes from Antigoneia and the importance of the Arcadian mint at this time is understandable in the light of Arcadian leadership in the invasion of Messene and of Spartan truculence which threatened Arcadia more directly than other regions. Financial support for the Third Macedonian War seems to have been chiefly the responsibility of Megara, Patras and Megalopolis and the strategic location of the first two mints with respect to battlegrounds in Thessaly and Aetolia may be significant. For the Early Period at least, it looks as though the production of League money was concentrated in a single mint within each major geographical region, with the activity of various mints at various times bearing some relationship to the movements of the Achaean armies.

For an interval after Pydna there may have been no League silver. Differences in style and in the preservation of the hoard coins assigned here to the Early and Late Periods point to a break in the coinage. When it is resumed, there is greater diversification. Megara, Elis and Patras are still comparatively active but the first seems to have suspended operations in favor of Sicyon and Corinth before the Agrinion series ends. Patras is no longer the only mint of the Achaean district: Dyme, Aegium, Aegira and Pellene make contributions in various degrees. There is a little League money from Messene and Argos and a second Argolid mint, Epidaurus, is now open. In Arcadia, at least six mints — Caphyae, Cleitor, Pheneus, Tegea, Pallantium and Lusi — supplement the small issues of Megalopolis. The final period of League minting involves the extensive output of Megalopolis with Arcadian types and ΜΕΓ legend and the Federal issues of Sparta, Dyme, Patras and Elis with smaller coinages at Aegium, Aegira and perhaps a few other mints. Again it seems significant that many of these cities are in the northern part of the Peloponnesus and hence close to areas of military activity.

This is, of course, only part of the picture. There are contemporary autonomous coinages from some of the same mints and until these have been analyzed and their chronologies determined, no one can say to what extent they supplement or take the place of Achaean emissions. Nor can we be certain that the Federal coinage itself gives a true record of mint activity. There may have been far fewer mints

in operation than the symbols and ethnics on the coins imply. What seem to be mint marks may in reality be nothing more than acknowledgements of financial contributions to the League treasury. It is difficult to see in the erratic pattern of the coinage any evidence of efficient minting procedure. One would assume that the expense of opening and staffing a mint for the production of a single issue of silver, or of bronze for that matter, would have been high, yet there are a number of communities which ostensibly struck only once. Did they strike locally or did they pay over to the Federal exchequer a certain sum in miscellaneous currency which was then turned into Federal money at a central mint or mints?

The available material does not prove that this happened but there are suggestive bits of evidence. In the Agrinion Hoard we have coins of Elis and Patras struck from the same obverse dies (Nos. 345 and 347 of Elis; Nos. 299 and 300 of Patras). In both cases the Patras strikings represent a later stage of the die.<sup>122</sup> It may be that the two dies were sent from Elis to Patras but it seems more likely that the coins were all produced in the Elis mint. The issue of Elis to which Nos. 345 and 347 belong is first inscribed  $\Lambda Y$  and later  $\Lambda Y-\Sigma\Omega$ ,<sup>123</sup> while the Patras coins are inscribed  $\Lambda Y-AP$ . A plausible reconstruction of the sequence of emission can be suggested on the basis of these facts. At some time in the 175–168 period, Patras stopped her large  $\Delta I$  coinage. Elis at about the same time or perhaps slightly earlier had started her  $AN$  issue. A few years later Patras made an additional financial contribution to the war effort. The sum involved was not large and rather than reopen the mint for a small issue, it was decided to have the money struck at Elis, then engaged in producing the  $\Lambda Y$  issue. The  $\Lambda Y$  control was retained for both lots of coinage but that of Patras was marked with the subsidiary  $AP$  control and that of Elis with  $\Sigma\Omega$ .

The present survey provides no evidence of other dies shared by different mints but they may appear when more material is collected.

<sup>122</sup> No. 299 has die breaks below the hair in the lower left field and between the hair and the top of the wreath; these are not present on No. 345. No. 300 has breaks in the area of the chin not found on No. 347.

<sup>123</sup> The sequence of controls is established by Nos. 344 and 349 of Elis; the  $\Lambda Y-\Sigma\Omega$  coins have die breaks not apparent on the  $\Lambda Y$  pieces. This is perhaps true of 343 and 348 as well but the specimens are worn and it is hard to be sure.

Meanwhile there are numerous examples of stylistic rapprochements so striking as to imply a common engraver if not a common mint. The small eagle issue at the very beginning of the Elean coinage may have been struck at Patras from dies used for the latter's  $\text{K}-\text{N}$  issue. During the 188–180 period the issues of Elis and Antigoneia are very close in style, some dies unmistakably from the same hand. And again one notes a possibly significant differentiation of control markings:  $\text{C}\Omega$  alone on most dies of an Antigoneia issue but a few with  $\text{C}\Omega\text{ΠA}$ , and it is these  $\text{C}\Omega\text{ΠA}$  dies which are almost identical in style with those of Elis inscribed  $\text{C}\Omega\text{C}\text{I}\text{A}\text{N}$ . The stylistic parallels in the 175–168 period have already been stressed. Were the very small Achaean issues of Megalopolis, Antigoneia(?), Argos and Messene the products of a single mint, perhaps Messene which seems to have been the most active? This would not only account for the stylistic similarity of this group of issues but would also explain the stylistic differences within what purports to be the coinage of a single mint. The situation at Megalopolis is especially confusing. Throughout the Early Period the Arcadian city produced a series of large emissions bearing Arcadian types. Two very small issues with Achaean types, of dissimilar workmanship and with heads facing in the opposite direction, are interpolated in the Arcadian sequence. If the Achaean coins were actually struck elsewhere, the anomalies would be understandable. Finally, one wonders if the single small emission of Sparta at the end of the Early Period may not have been minted at Elis.

During the Late Period there are again examples of issues from different mints which show close stylistic relationships, and at this time there are more mints which seemingly produce only one or two issues. Two or three central workshops is a possibility to be tested against a corpus of the coinage.<sup>124</sup>

The appearance of the same control combination on coins of Elis and Patras and on those of Elis and Antigoneia has been noted above. Other cases of repetition are apparent from the tabulations on pages 116–117. Was the  $\text{EY}$  control transferred from Sicyon to Patras and then to Antigoneia in the early stages of the coinage? Did Antigoneia also

<sup>124</sup> That Messene served as a mint for the League during at least part of the Late Period is suggested by the fact that the same obverse die was used for autonomous and Federal issues (PLATE XLVI, F and 609).

inherit the ~~AP~~ control of Corinth? If we knew what the monograms and names signified, a comprehensible pattern might emerge, but the present record gives the impression that duplication is, for the most part, fortuitous.

One interesting result of the present inquiry is the light it throws on the financial support given the League by its members. At its height the Achaean Federation included some 60 communities. Of these, only 22 struck or participated in the striking of the silver coinage which supported the League's activities. Many of the mints, moreover, produced very few issues, often of small size. In the case of towns of minor importance this is not surprising but it is hard to explain the comparative inactivity of centers like Corinth, Sicyon and Argos. It may be that their autonomous coins compensated for the scantiness of their League emissions as was certainly the case with Megalopolis. If the interpretation of the money as basically a war coinage is correct, it is also probable that the obligations of membership could be discharged in times of emergency by contributions of either money or men. It seems clear that the source of the monetary contributions was recorded on the coins themselves whether they were struck at local workshops or in central mints. During the last years of the League's life, however, the system apparently broke down for the number of cities involved in the final issues of Federal coinage cannot be reconciled with the extensive public collections recorded for the period. We have, for example, an inscription from Megalopolis, dated 148/7 B.C.,<sup>125</sup> giving a list of donors of from one to six staters as a service to the city. In the next year, according to Polybius (38.15), Diaeus' preparations for war included the order for all citizens capable of bearing arms to muster at Corinth and the exaction of contributions from the wealthiest inhabitants, women as well as men, to fill the depleted public exchequers. Polybius goes on to say that there was no choice in the matter, men were forced to give whatever they were assumed to possess and women had to contribute their jewelry and that of their children to a fund which could only bring destruction on them. The implication is that these measures were widespread and that "gifts" came from all member cities vulnerable to "persuasion." If the bulk of the terminal issues of Megalopolis, Patras and Dyme

<sup>125</sup> *IG V<sup>2</sup>*, 439, and also discussed by Hiller, *RE* 15, 1932, 138.



and the tremendous output of Elis<sup>126</sup> are, as seems likely, the fruit of these levies, then it must have proved impossible under the pressure of mass minting to record the specific source of the contributions.

## THE AETOLIAN LEAGUE

(Nos. 610–679)

This large series of Federal emissions, like its counterpart in the Peloponnesus, needs to be studied systematically, for only a corpus and die study will provide firm evidence for sequence and chronology. Meanwhile the data of the Agrinion Hoard, supplemented to some extent by other material, help to define the periods of striking with some degree of precision.

The most worn coins of the hoard and the earliest in style belong to a group of issues with three primary controls (A, ΔI and Α), usually placed in the exergue, and various secondary controls, usually placed below the boar (Nos. 611–627).<sup>127</sup> Several obverse styles are represented and there is a definite relationship between primary control and obverse style in the case of the A and ΔI emissions. Within the Α issue there is greater variety. The boars of these early coins are generally shown with heads down, a rendering not found on later strikings, but there are exceptions, especially in the Α series.

A second and extremely homogeneous group of issues is represented by Nos. 628–667 of the Agrinion Hoard. After the sequence gets under way, all obverse dies can be divided into two basic styles: the first found on Nos. 631–642 and later on Nos. 650–651 and the second appearing with No. 643 and continuing through 649 and then reappearing with the somewhat stiffer and distinctly unattractive heads of Nos. 652–665. Nos. 666–667 are cruder versions of this second style.

<sup>126</sup> The huge size of the late Elean coinage is best indicated by the infrequency with which duplicate dies are found. In the ANS Cabinet alone there are thirteen coins of the Ϝ issue from twelve obverse dies and fourteen of the Ϙ issue, each with a different obverse die. A partial check of other sources turned up seven Ϝ coins with six new obverse dies and seven Ϙ coins with seven new dies.

<sup>127</sup> No. 610 is a single example of a group of still earlier issues with letters on the obverses.

On the reverses of Group II the boars, larger and more ferocious than those of Group I, are invariably rendered at bay with heads erect. A few dies show a hindleg extended, giving the animal a peculiar stance. Control marks have been removed from the exergue and are now usually combined below the boar. There are exactly two primary controls:  $\Sigma$  and  $\Delta E$ . Seventeen secondary controls coupled with  $\Sigma \Omega$  and five with  $\Delta I \Sigma$  are found in the Agrinion Hoard alone and this is by no means the complete record.<sup>128</sup> There is some overlapping: both primary controls are combined with TI,  $\Lambda$  and  $\Xi$ . There is a very great deal of die linkage. One obverse die is coupled with  $\Xi$ — $\Sigma$ ,  $\Xi$ — $\Sigma$ ,  $\beta$ — $\Sigma$  and  $\Pi$ — $\Delta E$ . Another links  $\beta$ — $\Sigma$ ,  $\Lambda$ — $\Delta E$  and  $\Delta A M O$ — $\Delta E$ . The instances of two combinations sharing an obverse die are numerous, as can readily be seen from the catalogue. And again it should be stressed that this is a fragmentary record based on a limited amount of material.

The conclusion is inescapable. Despite the diversity of secondary controls, the coins of the  $\Sigma \Omega$  and  $\Delta I \Sigma$  emissions with their stylistic homogeneity, extensive die linkage and similar state of preservation in the Agrinion Hoard are roughly contemporaneous.

A third and last group of issues (Nos. 668–679)<sup>129</sup> is separated by a fairly considerable interval of time from the strikings of Group II. The coins are well preserved as a lot and some are very sharp. Obverse heads are quite different from those of Group II and much more appealing in their youthful delicacy. There is a uniformity in the rendering, especially pronounced in Nos. 670–678. Nos. 670–679 have a single primary and five secondary controls below the bellicose boars:  $\Xi$  or EY combined with  $\Delta I \Omega$ ,  $\kappa$ ,  $\Delta \Omega P$ ,  $\beta \Xi$  and  $\Delta$ . A transferred die joins the  $\Delta \Omega P$  and  $\beta \Xi$  emissions.

This is a smaller coinage than that of the preceding groups on the evidence of known obverse dies: ten in the Agrinion Hoard as compared with seventeen for Group I and twenty-eight for Group II.

<sup>128</sup> Coins with  $\Delta E$  and TI,  $\Xi$  and  $\Lambda$  were in the Western Greece Hoard;  $\Delta E$  combined with  $\kappa \Lambda E \Omega$  appears in the Olympia Hoard.

<sup>129</sup> There is no firm evidence for the placement of Nos. 668–669. Their system of control markings does not fit into the pattern of either Group II or III and probably indicates small isolated issues. The obverse heads are somewhat similar to those of Group III and the coins are better preserved than the average of Group II, but only two specimens are available for comparison.

It is also a coinage struck over a very limited period on the evidence of condition, the stylistic similarity of obverse dies and the appearance of the same basic control combination on five of the seven emissions.

The Aetolian League coinage resembles its sister currency to the south in consisting not of a succession of annual issues spread over a long period of time but of several groups of large emissions of relatively short duration. Not all known issues are represented in the Agrinion Hoard and the material available provides no basis for the dating of the earliest hemidrachms, but what we do have comprises the great bulk of the coinage and it at least belongs to the second century. The coins of Group I are closely comparable in condition to those of the first period of the early Achaean League series and are very probably to be connected with the war against Rome in the late 190's. In the interval between the settlement of 189 and the beginning of the Third Macedonian War, Aetolia seems to have struck little, if any, silver. The coins of Group II with their evidence for a short period of concentrated coining would belong to the years before Pydna and again the condition of the hoard pieces substantiates the relationship with the pre-Pydna series of the Achaean League.

Of special importance is the evidence from Agrinion for a silver coinage after 168 B.C., the generally accepted date for the dissolution of the Aetolian League. The well-preserved coins of Group III must be roughly contemporary with the last Achaean issues of the hoard and hence datable to the 150's. It seems likely that these hemidrachms reflect a feeble and futile attempt on Aetolia's part to prevent by armed intervention the absorption of Heracleia into the Achaean League.<sup>130</sup>

#### THE DENARII (Nos. 680-717)

These coins are discussed in an Appendix by Rudi Thomsen and Michael H. Crawford.

<sup>130</sup> The annexation of Heracleia ca. 155-150 B.C. is discussed on page 98 in connection with the Achaean coinage.

## THE BURIAL DATE

This has not been easy to determine. If it were a question of the Greek material alone, the Agrinion Hoard would seem to be earlier than the deposits from Caserta, Western Greece and Olympia which have been cited throughout the present study. It contains none of the very late Achaean League coinage of Elis, Sparta, Dyme, Patras and Aegium and none of the final "Arcadian" strikings of Megalopolis — issues which appear in the other three hoards.<sup>131</sup> On the evidence of style and condition the latest Agrinion coins are Achaean issues of Aegium, Aegira, Sicyon, Argos and Corinth<sup>132</sup> and Aetolian issues with EY as a control combination.<sup>133</sup> These strikings apparently belong to the period ca. 155–150 B.C.<sup>134</sup> Although the series show some wear, their general condition is good to very good,<sup>135</sup> and a burial date ca. 150–145 would not only take into account the preservation of the coins but also explain the absence of the last Achaean emissions. Either the issues had not yet been struck or they had not had time to penetrate the remote hinterland of Aetolia before the hoard was interred.

The denarii introduce a complication. The most recent of the Roman coins are in excellent to FDC condition and clearly later than any of the Greek issues. According to Sydenham the sequence begins ca. 150 and extends down to 110–108 but, as Thomsen and Crawford have shown in the Appendix which follows, Sydenham's chronology must be revised. The latest denarii of Agrinion are probably to be

<sup>131</sup> Not all coinages are in all hoards but each deposit has a substantial amount of late material.

<sup>132</sup> Some of the coins are illustrated on PLATE XLIX, 549, 578, 586c, 596, 602 b, 579 a.

<sup>133</sup> PLATE LIII, 670–679.

<sup>134</sup> For a discussion of the chronology see pp. 97–98, 105–106.

<sup>135</sup> The Corinthian hemidrachms, for example, are very well preserved. Obverses 581 and 583 look rubbed but this is the result of worn dies; reverses of the two coins are quite fresh.

dated ca. 135 B.C., at which time or very shortly thereafter, the Agrinion Hoard would have been buried.

Unless the denarii are earlier than Thomsen and Crawford believe, one must either accept this later burial date or regard the Greek and Roman coins as two separate lots of material brought together in antiquity. This last is not a very convincing hypothesis: a hoard of 1301 Greek coins buried ca. 150–145, the cache subsequently disinterred and 39 denarii added to it prior to reburial some ten to fifteen years later. To be sure we know of no other Achaean League hoard with denarii, and this might be considered an argument for division, but the Agrinion Hoard is also unique in including tetradrachms, and the coins of Athens and Cyme are an integral part of the find.<sup>136</sup>

It seems likely that the Agrinion Hoard is a currency deposit. Its size, its pattern of wear, its heavy proportion of early coins and its heterogeneous composition point to a collection withdrawn simultaneously from current circulation. The inclusion of Athenian tetradrachms of the pre-Pydna period is in accord with an eastern orientation of the Aetolian economy in the years before the Third Macedonian War; the inclusion of denarii of post-Pydna date is explicable in terms of tighter Roman control after the defeat of Perseus. Against the historical background, there is every reason to regard the admixture of currencies in the Agrinion Hoard as a true reflection of the kind of money circulating in northwestern Aetolia in the middle decades of the second century. This is of some significance,

<sup>136</sup> Pp. 80–83. Since the Cyme tetradrachms were unquestionably struck before the middle of the century, there is no justification on grounds of chronology or condition for segregating them from the hoard as a whole. This is also true of the Athenian coins; their wear is wholly compatible with a burial in the 140's or 130's. The evidence is the firmer for being provided by two lots of material, for it is surely impossible to divide the two series of tetradrachms, accepting the Cyme pieces as part of the original hoard and rejecting the Athenian as an independent accumulation. These coins of large denomination undoubtedly belong together.

As has already been pointed out (*NC* 1962, 320 ff.), the Agrinion Hoard strongly supports the present chronology of the New Style coinage. On the later dating proposed by David Lewis (*NC* 1962, 275 ff.) the well-worn tetradrachms, here assigned to 173/2–169/8, would have been struck between 140 and 136 and hence would be contemporary with denarii in FDC condition and at least a decade later than hemidrachms of Corinth in very good condition.

for if we are dealing with a single deposit and if the revised chronology of the denarii is correct, the Agrinion Hoard indicates more clearly than any text the impoverished condition of Aetolia from the late 150's on and the extent to which the region was isolated from the rest of Greece.

# TABLES OF THE ACHAEAN LEAGUE ISSUES

## CONSPECTUS OF HOARDS

	Arcadia '29	Caserta	Western Greece	Olympia	Agrinion
<i>Corinth</i>					
♀-ΑΠ	2	—	1 <sup>a</sup>	2	6
Pegasus-Α	—	—	—	7	6
Pegasus-ΚΑΣ	—	—	1	6	5
<i>Sicyon</i>					
EY	6	2	6	8	17
Dove-ΝΙ	—	3	—	7	20
Dove-Α	—	—	—	2	5
<i>Patras</i>					
Trident-Α	3	1	8	10	14
Trident-EY	1 <sup>b</sup>	1	6	9	16
Trident-Κ, Ν	1	—	3	4	3
Trident-Μ, ΔΙ	9	4	8	4	18
Trident-ΔΙ	13	9	19	25	56

<sup>a</sup> No. 542, an issue of Corinth, is erroneously included in the Antigoneia section.

<sup>b</sup> Listed under uncertain mints (*NNM* 74, No. 145). The reverse has [ Y to 1. and r.; the other markings, which are taken for letters, are diebreaks.

*Tables of Achaean League Issues*

III

	Arcadia '29	Caserta	Western Greece	Olympia	Agrinion
Dolphin-ΛΥ, AP	3 <sup>c</sup>	1 <sup>d</sup>	7 <sup>d</sup>	11	17
Dolphin-AΠ	—	—	—	—	4
Dolphin-TEI, AN	—	—	—	1	2
Dolphin-A, ΞΕ	—	—	—	4	8
Dolphin-ΘΕ, ΞΕ	—	—	1	6	6
Later issues	—	18	13	41	—
<i>Argos</i>					
Wolf's head	1	4	5	5	17
Harpa	3	1	4	5	3
Club	—	—	6	4	10
<i>Corone</i>					
ΞΕ	4 <sup>e</sup>	1	3	1	6
<i>Messene</i>					
ΠΛ, ΞΕ, Χ	—	—	1	2	8
Δ, ΠΔ	2 <sup>e</sup>	—	3	2	4
AΠ	1 <sup>f</sup>	—	2	6	7
NΦ	3 <sup>e</sup>	1 <sup>e</sup>	6	14	16
ΞΕ-OP	—	2 <sup>e</sup>	2	5	15
⊗	—	4 <sup>e</sup>	14	5	17

<sup>c</sup> Listed under uncertain mint.

<sup>d</sup> Listed under Dyme.

<sup>e</sup> Listed under Megalopolis.

<sup>f</sup> Listed under Pagae-Megara.



	Arcadia '29	Caserta	Western Greece	Olympia	Agrinion
MEΣ	—	—	—	1	1
Tripod	1 <sup>g</sup>	—	—	2	2
<i>Elis</i>					
Eagle-ΝΙΣΩ	1	—	1	—	3
ΩΩCIAN	2	—	2	7	7
ΦΙ	1	—	1	2	1
AN	1	2	16	13	22
ΛΥ, ΛΥΣΩ	6	4	31	39	40
<hr/>					
Fulmen-Ι	—	1	—	5	5
Fulmen-Σ, Γ	—	—	1	2	11
Fulmen-Σ, Σ' Ι	—	1	—	2	2
Fulmen-Σ, Α	1	2	5	4	18
Fulmen-ΡΙ, Χ	—	1	1	4	7
Later issues	—	75	21	9	—
<i>Antigoneia</i>					
⌘	8	1	14 <sup>h</sup>	34	55
ΩΩ	16	15	54	53	56
EY	21	6	40	31	74
?ΛΥ	—	—	—	1	1
<i>Megara</i>					
Cithara-ΜΕΓΩ	1	2	3	5	12
Cithara-ΔΩΡΟ	2	3	9	7	13
Cithara-ΘΟΚΑ	2	—	2	6	10

<sup>g</sup> Listed under Hermione. The obverses of Nos. 26–27 are transposed on pl. II of *NNM* 74.

<sup>h</sup> No. 542, under Antigoneia, is a coin of Corinth.

	Arcadia '29	Caserta	Western Greece	Olympia	Agrinion
Cithara-ΔΙΟ	—	—	—	—	1
Cithara-ΗΡΟ	4	—	8	12	19
Cithara-ΠΥΘΟ	—	—	—	1	2
Cithara-ΠΕΛΑ	—	—	—	3	1
Cithara-ΦΙΛΟΞ	—	—	—	1	1
Cithara-ΔΙΔΟ	2	—	2	1	3
Cithara-ΗΡΑ	4	—	1	4	10
Cithara-ΔΙΦ	3	1	1	3	11
Cithara-MAT	3	—	2	1	5
Cithara-ΣΩΚΡΑ	—	—	2	1	11
<i>Megalopolis</i>					
Pedum-ΚΔ	1 <sup>1</sup>	—	3	—	6
Syrinx-BEΛ	1	2	6	6	7
Fulmen-ΞΒ, ΚΑ	3	3	12	8	18
Syrinx-Ξ, ΚΙ	7	3	7	12	25
<i>Sparta</i>					
Caps-ΜΕ	—	1	3	5	5
ΛΑ-ΕΥ	1 <sup>1</sup>	1 <sup>1</sup>	—	1	—
Later issues	—	20	8	34	—
<i>Caphyae</i>					
Athena hd.-Ω	—	—	—	—	5
Athena hd.-Ξ	—	—	1	—	—

<sup>1</sup> The symbol of this unillustrated reverse is described as a fulmen but this is almost certainly an error.

<sup>1</sup> Listed under Epidaurus.

	Arcadia '29	Caserta	Western Greece	Olympia	Agrinion
<i>Pheneus</i>					
Caduceus-EY	—	—	—	—	4
<i>Pellene</i>					
Chelys-AΘ, ΦΙ	—	—	2	—	4
<i>Epidaurus</i>					
Cupping vase-ΣΩΔΑ	—	—	1	1	2
Cupping vase-ΡΩ, ΙΑ	—	—	—	4	—
Snake-ΤΙ, ΙΑ	—	—	—	—	3
Snake-ΣΩ, ΣΙ or Κ	—	1	—	2	—
<i>Cleitor</i>					
Helios-ΔΙ	—	—	—	1	1
Helios-ΚΛΗ	—	—	1	—	—
ΚΛΗ	—	—	1	1	—
<i>Aegium</i>					
Fulmen-KO	—	—	3	2	7
Fulmen-ΓΛ	—	—	—	—	2
Fulmen-O, ΤΕΙ	—	1	1	11	—
ΑΡΙCΤΟΔΑΜΟC	—	63	3	—	—
<i>Dyme</i>					
Head-ΕΝ	—	—	—	2	6
Fish-ΛΝ	—	—	—	1	—
Later issues	—	14	1	23	—

	Arcadia	Caserta	Western Greece	Olympia	Agrinion
<i>Aegira</i>					
Goat-ΓΛΑΥ	2	1	6	2	4
Goat-ΑΛΚΙ	—	2	10	5	22
Goat-ΞΕ	—	—	—	1	1
Goat-ΛΑ	—	—	—	—	1
Later issues	—	—	—	5	—
<i>Pallantium</i>					
Trident-ΠΑΛ	—	6	1	6	—
Trident-ΠΑΛ, Α	—	—	3	—	—
Trident-ΠΑΛ, Ε	—	15	10	21	—
<i>Tegea</i>					
TE	—	13	4	21	—
TE-ΘΗ	—	8	4	5	—

There is a circle of dots on obverses of this issue.

The Arcadian coins of 195-188 are our Nos. 202-205 (Dengate's Periods IIA for which he records 7 obverse dies). Coins without an eagle on the reverse are also assigned by Dengate to this period but it is likely that they are earlier.

The later Arcadian coins (ca. 175-168) are the die-linked issues with  $\Delta\Lambda$  and  $\Delta$  and those with no controls on the reverse (our Nos. 206-239 and Dengate's Periods IIB and III for which he records 36 and 8 obverse dies).

The Arcadian coins of 195-188 are our Nos. 202-205 (Dengate's Periods IIA for which he records 7 obverse dies). Coins without an eagle on the reverse are also assigned by Dengate to this period but it is likely that they are earlier.

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**Aegium Epidaurus Pellene Pheneus Megara Megalopolis Elis Caphyae Patras Dyme Aegira Sicyon Argos Corinth**

a. 160-  
 50 B.C.  
 KO(6)---ΣΩ(4)---AΘ(6)---EY(5)---  
 ΓΛ(4)---ΤΙ(4)  
 ΦΙΛΟΞ(2)  
 ΔΙΔΟ(3)---ΞΒ-ΚΑ(1)---Ι(5)  
 ΗΡΑ(8)---Ξ-ΚΙ(3)---ΣΩ-Γ(8)---Σ(6)  
 ΔΙΦ(7)---ΔΙΦ(7)---ΣΩ-Ξ(3)---ΤΕΙ(3)---ΕΝ(5)  
 ΜΑΤ(4)---ΣΩ-Α(16)---ΞΕ(10)---ΓΛΛΥ(6)  
 ΣΩΚ(7)---Π-Χ(7)---ΛΑ(1)---ΞΕ(3)  
 NI(7)  
 NI(12)---Club(6)---KAS(6)

## APPENDIX

### THE DENARII OF THE AGRINION HOARD

BY RUDI THOMSEN AND MICHAEL H. CRAWFORD

The thirty-nine Republican denarii in the Agrinion hoard are:

<i>Syd. no.</i> <sup>1</sup>	<i>Moneyer</i>	<i>Cat. no.</i> <sup>2</sup>
	Anonymous with Dioscuri	680
349	Cn. Do	681
382	Nat	682
384	L. Sauf	683, 684
386	P. Sula	685, 686
390	Natta	687, 688
391	Flaus	689, 690
404	L. Cup	691
411	C. Antesti	692, 693
432	C. Reni	694-699
448	A. Spuri	700
450	Cn. Lucr Trio	703
451, 465	L. Antes Grag	704-708
455	P. Paetus	701
456	L. Trebani	711
475	M. Opeimi	716
477	Q. Pilipus	717
487	M. Aburi Gem	715
489	M. Baebi Q. f Tampi(l)	702
492	P. Mae Ant	714a, b
494	Ti. Minuci C. f Augurini	712, 713
525	C. Serveili M. f	709, 710

<sup>1</sup> E. A. Sydenham, *The Coinage of the Roman Republic* (London, 1952). In all lists, the moneyers' names are given in the form in which they occur on the coins.

<sup>2</sup> The denarii are entered in the catalogue according to the arrangement outlined on pp. 127-130. The degree of wear is not given since it cannot, in so small a group, be used as a basis for argument.

The date of burial of the denarii in the Agrinion hoard depends on its relationship to other late second century B.C. hoards, particularly the hoards of Riccia,<sup>3</sup> Maserà<sup>4</sup> and San Giovanni Incarico,<sup>5</sup> with which the Agrinion hoard displays a striking similarity of composition. The three hoards contain the following issues struck after the deposition of the Lacco Ameno hoard:<sup>6</sup>

<i>Syd. no.</i>	<i>Moneyer</i>	<i>Riccia</i>	<i>Maserà</i>	<i>San Giovanni</i>
429	M. Aureli Cota	6	2	—
432	C. Reni	94	19	9
434	Cn. Gel(i)	39	18	2
436	C. Cur Trige	38	12	1
438	Anonymous	21	6	1
440, 441, 454	C. Val C. f Flac	40	15	5
443	L. Iuli	14	12	2
444	L. Atili Nom	1	—	—
445	C. Titini	6	1	—
446, 458	M. Auf Rus	2	—	—
448	A. Spuri	17	5	4
450	Cn. Lucr Trio	121	23	4
451, 465	L. Antes Grag	162	73	8
455	P. Paetus	43	17	1
456	L. Trebani	20	6	1
459	C. Cur f Trig(e)	6	3	—
461	Sex. Po(m) Fostlus	91	21	4
463	C. Aug	24	8	1
466	C. Numitori	1	1	—
468	P. Calp	23	8	2

<sup>3</sup> *ZfN* 1884, 202.

<sup>4</sup> *NSc* 1883, 223. The hoard is preserved in the Museo Nazionale di Napoli, and the list incorporates a number of corrections to earlier descriptions.

<sup>5</sup> *RIN* 1893, 99.

<sup>6</sup> *Annali dell'Istituto Italiano di Numismatica* (1960–61), 153; *Rivista di Cultura Classica e Medioevale* (1963), 54, n. 130. Together with the hoards of Rome (*RIN* 1907, 211), the Cani Islands (*Bulletin archéologique du comité des travaux historiques et scientifiques* [1916], cciv) and West Sicily (unpublished, in the Museo Nazionale di Palermo, of the same date as the Cani Islands hoard), the Lacco Ameno hoard provides a clear dividing-line in the sequence of the coinage.



<i>Syd. no.</i>	<i>Moneyer</i>	<i>Riccia</i>	<i>Maserà</i>	<i>San Giovanni</i>
470	L. Minuci(u)	39	15	1
472	L. Post Alb	28	4	1
473	L. Opeimi	30	4	2
475	M. Opeimi	32	3	2
476	Sex. Iuli Caisar	7	2	—
477	Q. Pilipus	78	3	3
478	Q. Max	—	1	3
480	M. Metellus Q. f	36	4	3
483	C. Serveil	1	—	—
485	C. Metellus	—	4	1
487	M. Aburi Gem	64	25	4
489	M. Baebi Q. f Tampi(l)	170	58	14
490	C. Aburi Gem	28	11	2
492	P. Mae Ant	63	15	—
494	Ti. Minuci C. f Augurini	46	13	5
496	Anonymous	4	3	—
500	M. Marc	69	21	2
502	C. Cassi	68	10	3
505	T. Q.	36	4	3
507	M Varg	65	17	2
509	Q Mete	41	7	1
511	M. Acilius M. f	25	7	—
513	M. Porc Laeca	—	4	3
514	Cn. Dom	42	5	2
516	T. Clouli	50	1	—
517	N. Fabi Pictor	7	1	1
525	C. Serveili M. f	52	29	6
527	Ti. Vet	60	3	1

The Riccia hoard, by far the largest of the three hoards, consisted of 168 victoriatas and 3,067 denarii; the Maserà hoard was made up of 1204 coins and the San Giovanni Incarico hoard contained about 800 coins, of which only 202 were preserved for identification. It is fairly certain that no common denarius issued in the years preceding the deposition of the Riccia hoard is missing from it. The Maserà

hoard can also be regarded as having a very full representation of the issues struck before its burial. The Maserà hoard contains 4 denarii of M. Porcius Laeca, 1 of Q. Maximus and 4 of C. Metellus, while the Riccia hoard has none of these issues. Since the Riccia hoard usually has a much larger number of specimens of the various issues than the Maserà hoard, the Riccia hoard must have been deposited a short time before the Maserà hoard, at a time when at any rate the denarii of M. Porcius Laeca, which are very common, had not yet come into circulation. On the basis of the fourth of the San Giovanni Incarico hoard preserved, it seems most probable that it was buried at about the same time as the Maserà hoard.

The absolute chronology of the three hoards is less certainly established. However, an indication of the period of their burial is afforded by the fact that none of them includes any specimen of the serrate denarii struck by L. Porcius Licinus, L. Cosconius M. f, L. Pomponius Cn. f, M. Aurelius Scaurus and C. Malleolus C. f (Syd. 520–524). These denarii, bearing the names of L. Licinius and Cn. Domitius as well as those of the issuing magistrates, are shown by the evidence of the hoards to have been struck several years before 100 B.C.<sup>7</sup> and Mattingly suggested that the issue was occasioned by the foundation of Narbo Martius in 118 B.C.<sup>8</sup> For, as is evident from the carnyx forming part of the reverse type, the issue alludes to the wars against the Gauls which ended with the defeat of the Allobroges and their ally, King Bituitus of the Arverni, by Cn. Domitius Ahenobarbus (Cos. 122 B.C.), and Q. Fabius Maximus (Cos. 121 B.C.). In Witte's opinion,<sup>9</sup> shared by Babelon,<sup>10</sup> Bahrfeldt<sup>11</sup> and Grueber,<sup>12</sup> the warrior of the reverse type is intended to be Bituitus himself. This theory was contested by Kubitschek,<sup>13</sup> who preferred to identify the warrior

<sup>7</sup> The group first occurs complete in the Pozoblanco hoard (Th. Mommsen, *Histoire de la monnaie romaine* [Paris, 1865–75], II, 131). Between the deposition of this hoard and the issue of Piso and Caepio in 100 B.C. (see below, n. 19) there were some forty regular moneyers.

<sup>8</sup> *JRS* 1922, 231.

<sup>9</sup> *Bulletin de la Société des Antiquaires de France* (1882), 348.

<sup>10</sup> *Description historique et chronologique des monnaies de la république romaine*, I, 463.

<sup>11</sup> *ZfN* 1895, 62.

<sup>12</sup> *Coins of the Roman Republic in the British Museum*, I, 184, n. 1.

<sup>13</sup> *NZ* 1913, 223.

with Mars, as Eckhel<sup>14</sup> and Mommsen<sup>15</sup> had already done. On either supposition, however, the coins display an appropriate allusion to the foundation of Narbo, which was a result of the defeat of Bituitus and which was surnamed Martius. L. Licinius Crassus, whose name appears on the coins under discussion, is associated with the founding of the colony.<sup>16</sup> As a general rule, however, a colony was not founded by one man and so it is a reasonable assumption that the other name on the coins, Cn. Domitius, indicates Crassus' colleague in the founding of Narbo Martius. As a son of the conqueror of Bituitus, the young Cn. Domitius Ahenobarbus will have been a most suitable member of the commission to found the colony in Gaul.

Sydenham, while largely accepting Mattingly's theory, held (p. 64) that the coins were not actually struck until 112–109 B.C. But, as Mattingly stressed, their connection with the colony would on this view almost be lost.<sup>17</sup> Therefore, Sydenham's dating of the coins depends on the contention that the colony was founded later than 118 B.C. H. B. Mattingly, arguing mainly from the order of events in Cicero's account of the career of Crassus, placed the foundation of Narbo Martius in 110 B.C.<sup>18</sup> However, his supporting arguments, based on a conjectured date for the retariffing of the denarius and on prosopographical speculation, are not convincing and, of course, Cicero's language is far from being compatible solely with a chronological arrangement of his subject. Once Sydenham's unjustified ascription of the issue of Piso and Caepio to 96–94 B.C. is abandoned,<sup>19</sup>

<sup>14</sup> *Doctrina numorum veterum*, V, 196.

<sup>15</sup> *Geschichte des römischen Münzwesens*, 573.

<sup>16</sup> Cicero, *Brutus*. 160.

<sup>17</sup> *Proceedings of the British Academy* (1953), 244.

<sup>18</sup> *Hommages à Albert Grenier, Collection Latomus*, LVIII, 1159.

<sup>19</sup> Sydenham held (*NC* 1940, 164) that the small amount of coinage between the issue of Piso and Caepio and that of D. Silanus L. f of 90 B.C. (in fact of 91 B.C., *NC* 1964, 142) could not cover more than a very few years. There is no reason, however, to suppose that coining during the Roman Republic was always continuous and it does not seem possible to make it so at the expense of detaching a coin struck by a Caepio as quaestor some time before the Social War from a Caepio's known quaestorship in 100 B.C. The coinage of the period in question is in any case more extensive than Sydenham thought. The evidence of the Gioia dei Marsi hoard (*NSc* 1899, 146), preserved in the Museo Nazionale di Chieti, makes it clear that the issues of quinarii of T. Cloulius, P. Sabinus and C. Egnatuleius C. f were struck after the issue of Piso and Caepio and not before.

his reasons for dating the issue for Narbo Martius to 112–109 B.C. disappear and both colony and coins may reasonably be placed in 118 B.C.

With this point in the absolute chronology established, it is possible to work back to the date of deposition of the Riccia, Maserà and San Giovanni Incarico hoards. The arrangement of those moneyers who struck in the intervening period is facilitated by the hoard evidence which, for this period, is both full and consistent. The arrangement which emerges is as follows:

<i>Syd. No.</i>	<i>Moneyer</i>	<i>Zasiok</i> <sup>20</sup>	<i>Gerenzago</i> <sup>21</sup>	<i>Terranova di Sicilia</i> <sup>22</sup>	<i>Ancona</i> <sup>23</sup>	<i>Maddaloni</i> <sup>24</sup>	<i>Pozoblanco</i> <sup>25</sup>
498	Mn. Acili Balbus	—	—	1	1	2	—
532	Q. Fabi Labeo <sup>26</sup>	1	2	2	1	17	3
417	C. Cato	1	2	5	1	13	—
419	M. Fan C. f	3	—	2	—	9	2
423	M. Carbo	1	1	3	—	5	—
421	Q. Minu Ruf	3	2	—	—	3	—
410, 414	C. Pluti	—	3	—	—	6	1
415	Carb	1	—	—	1	3	2
531	M. Tulli	1	1	2	1	5	4
529	M. Fouri L. f Phili	—	3	1	1	13	16
541	Q. Mar C. F. L. R.	—	—	—	1	2	—
534, 544	M. Sergi Silus	—	—	—	—	8	1
530	Anonymous	—	—	—	—	—	1

<sup>20</sup> *Vjesnik za Arheologiju i Historiju Dalmatinsku* (1905), *Suppl.* 1–5, 1.

<sup>21</sup> *NSc* 1909, 299.

<sup>22</sup> Unpublished, in the Museo Nazionale di Siracusa.

<sup>23</sup> Unpublished, in the ANS.

<sup>24</sup> *NSc* 1914, 172. A group of twenty-five denarii, brought to the Museo Nazionale di Napoli later than the rest, are clearly shown by their wear and patination to be extraneous to the hoard. Among them is the denarius of T. Deidius. The figures in the table do not include the extraneous coins.

<sup>25</sup> See above, p. 121, n. 7.

<sup>26</sup> The Lucoli hoard (*Annali* 1957, 79), otherwise similar in composition to the Maserà hoard, includes one whole denarius and one fragment of Q. Fabius Labeo. The bulk of the whole pieces in the hoard, however, are plated. Presumably a forger's stock, it is of limited use for chronology.

Although the detailed arrangement still depends partly on stylistic considerations and is not therefore entirely certain, one important fact is evident: at least the moneyers from Mn. Acilius Balbus to M. Tullius had already struck before the appearance of the issue for Narbo Martius. Not only is this not present at all in the Zasiok hoard, which closes with the issue of M. Tullius, but it is only partially represented in the hoards of Gerenzago, Terranova di Sicilia, Roncarolo and Maddaloni. Clearly this issue was struck just a little earlier than the period of their burial and does not therefore occur complete before the Pozoblanco hoard.<sup>27</sup>

With the knowledge that there were at least nine issues, most of them large, between the burial of the Maserà and San Giovanni Incarico hoards and the striking of the issue for Narbo Martius, it is possible to postulate an almost certain date for the former. In his discussion of the Riccia hoard,<sup>28</sup> Mommsen held that it was buried in connection with the commotion among the Italian allies which culminated in the revolt and destruction of Fregellae in 125 B.C. Whether or not his explanation is correct for the hoard which he was considering, it is perfect for the hoard of San Giovanni Incarico, unearthed seventeen years after the publication of his paper. For the burial place of this hoard was in the very territory of Fregellae. Since it has emerged that it closes some little time before 118 B.C., it cannot reasonably be doubted that the occasion for its burial was the siege of Fregellae by the Romans.

Mattingly, while accepting the *terminus ante quem* of 118 B.C., maintained that the burial took place at the end of the 120's.<sup>29</sup> This dating results from Mattingly's association of the somewhat worn denarius of Ti. Veturius contained in the hoard with the insurgent Fregellae rather than with the mint at Rome, a hypothesis which can hardly be correct.

<sup>27</sup> The high incidence of die-cutters' mistakes suggests that the Narbo Martius issue was actually struck at Narbo. L. LIC. CN. QOM. occurs on denarii of L. Cosconius M. f (G. L. Fallani Coll., Vatican 2555), L. Pomponius Cn. f (BM 1193 [Rome], etc.) and M. Aurelius Scaurius (G. L. Fallani Coll., Vatican 2552), L. LIC. CN. DOM. on denarii of L. Pomponius Cn. f (Alba di Massa hoard, *RIN* 1913, 23, ANS), L. LIC. CN. QM. on denarii of L. Pomponius Cn. f (G. L. Fallani Coll.) and L. LIC. CN. ODM. on denarii of M. Aurelius Scaurus (Vatican 2554).

<sup>28</sup> *ZfN* 1875, 43.

<sup>29</sup> *ANSCent. Publ.* (New York, 1958), 452.

A more serious objection to 125 B.C. as the burial date of the San Giovanni Incarico and Maserà hoards is raised by Sydenham's interpretation of the denarii of Cn. Domitius. Sydenham (p. 63), following Grueber and Babelon, describes the reverse type of these denarii as: "Victory in biga r., holding whip; below, a man attacking a hound." He notes: "The reverse type commemorates the victory of Cn. Domitius, probably the father of the moneyer, over the Gallic tribes under Bituitus, who is said to have employed packs of enormous hounds to terrify the Roman soldiers." In view of the ancient tradition of Bituitus' war hounds,<sup>30</sup> a denarius with a representation of a man fighting a hound, struck by a Cn. Domitius in the later second century B.C., must refer to the victory of Cn. Domitius over Bituitus in 121 B.C. However, the animal with which the man is fighting is not a hound, but a lion<sup>31</sup> and the issue thus bears no reference to Bituitus. The natural dating of the three hoards to the period of the revolt of Fregellae may therefore be regarded as a firm basis from which to argue to the date of burial of the denarii in the Agrinion hoard.

The table on pp. 127–130 based on the hoard evidence, establishes the relative order for the later denarii. The issues in the Maserà hoard of later date than the close of the Syracuse hoard are judged to fall into two parallel series which are indicated in the table by the alternate use of roman and italic type. The issues which form the first series are alike in a number of points of detail as well as in general similarity of style and fabric of both silver and bronze. That the series derives from the issue of C. Serveilius M. f may be seen from the form of spike adopted for the helmet: an integral part of the design on the denarii of C. Serveilius M. f — absurd and out of place on those of C. Curiatius f Trigeminus and L. Trebanus. With the issue of P. Calpurnius, the point of attachment of the wing on the helmet is placed much further back and with that of Q. Pilipus a star is engraved on the flap, features which last to the end of the series.

The second series is of a much more uniform quality than the first, but has fewer links in details of design. The most noticeable is the

<sup>30</sup> Orosius. V.14.1.

<sup>31</sup> As was realized by Mommsen, *Geschichte des römischen Münzwesens*, 523, and Kubitschek, *NZ* 1913, 229.

border of dots on the reverses of the first six issues, a feature taken over from the reverse of C. Serveilius M. f.

A number of chronological indications, both absolute and relative, make it impossible to place either series after the other. The extended form of the name on no. 22 was clearly used to distinguish the issue from that of C. Augurinus, presumably the moneyer's elder brother. The type of the dodrans, a canting type of the gens Caecilia, must have been invented by M. Metellus Q. f and taken over by C. Cassius. But if the series beginning with the issue of Ti. Minucius C. f Augurinus cannot precede that beginning with the issue of C. Curiatius f Trigeminus, neither is the reverse arrangement possible. The erratic representation of nos. 42 and 43 in the Riccia and Maserà hoards is explicable only if they fall near the close of the hoards. The moneyer who struck no. 34, presumably the consul of 123 B.C., can hardly have struck later than his youngest brother, the consul of 113 B.C. and doubtless the moneyer who produced no. 47.

If a parallel arrangement of moneyers in the period before 125 B.C. is accepted, it remains to consider exactly what form the parallelism took. It does not seem probable that part of every triumvirate worked in each series, since there appear to be complete triumvirates within the series (e.g., nos. 33-35 and 41-43). A system of two triumvirates every year, one to each series, conflicts with what we know of the Roman constitution. The only remaining possibility is that the moneyers struck in each series in alternate years and that the workshop which was not actually producing coins spent the first part of its free year preparing blanks, the second part, after the appointment of the moneyers, cutting dies. It is notable that all the issues immediately preceding the appearance of the parallel series are very large and the labour was presumably found to be too much for one workshop. However, the way chosen to alleviate the situation was inevitably rather wasteful and there is no evidence that the system remained in force after 125 B.C.

Although the order presented here cannot, of course, be regarded as exact in every detail, no significantly different arrangement seems compatible with the evidence at present available. And although it is not yet possible to assign every moneyer to his proper year, the number of issues which fall between the latest in the Agrinion hoard

and the latest in the Maserà hoard suggests that the former should be regarded as having been struck about 135 B.C. This year or one very close to it may thus be accepted as the date of burial of the denarii in the Agrinion hoard.<sup>32</sup>

	<i>Petacciato</i> <sup>33</sup>	<i>Pachino</i> <sup>34</sup>	<i>Syracuse</i> <sup>35</sup>	<i>Banzi</i> <sup>36</sup>	<i>Agrinion</i>	<i>Riccia</i>	<i>Maserà</i>
1. Cn. Gel(i) <sup>37</sup>		1		3		39	18
2. C. Reni		3	1	8	6	94	19
3. Anonymous with crescent	6	1				21	6
4. C. Cur Trige	2					38	12
5. M. Aureli Cota <sup>38</sup>			1			6	2
6. A. Spuri <sup>39</sup>		1		1	1	17	5

<sup>32</sup> Michael Crawford believes that a date of about 130 B.C. is preferable for the latest issue in the Agrinion hoard. In any case, the retariffing of the denarius cannot have occurred in the Gracchan period, as is now generally held, but must be placed in the 140's B.C.

<sup>33</sup> Unpublished, in the Museo Nazionale di Chieti.

<sup>34</sup> Unpublished, in the Museo Nazionale di Siracusa.

<sup>35</sup> *NSc* 1896, 495; *RIN* 1912, 321, n. 3. The hoard is preserved in the Museo Nazionale di Napoli and the early nucleus can easily be distinguished by the patination.

<sup>36</sup> *NSc* 1932, 395.

<sup>37</sup> A quadrans of Cn. Gellius occurred in the Veroli hoard (*NSc* 1931, 542) as the only piece of an issue later than that of C. Antestius. However, since the only other moneyers to strike bronze between C. Antestius and L. Antestius Gragulus were C. Valerius Flaccus, Sex. Pompeius Fostlus and Ti. Veturius (see M. von Bahrfeldt, *Nachträge und Berichtigungen*, passim), this fact is not of much use. Two points may be made in favour of placing the issue of Cn. Gellius immediately after the close of the Lacco Ameno hoard. Not only can the laurel-wreath of his denarius be regarded as a development of the bead and reel border used by Annius Rufus, but it may explain the reduction in the size of head on the group of issues which falls before the retariffing of the denarius and which is largely represented in the Petacciato and Pachino hoards.

<sup>38</sup> Note the necklace of pendants on part of the issue, copied by M. Baebius Tampilus.

<sup>39</sup> Bahrfeldt (*Nachträge und Berichtigungen*, I, 241) reports two variants of the denarius of A. Spurius. Both have Victory in a biga on the reverse (the die is the same in both cases), one has XVI on the obverse. Both the pieces in question (now in the Medagliare Capitolino and seen in 1967 by Michael Crawford) are clearly forgeries, probably ancient.



	<i>Petacciato</i>	<i>Pachino</i>	<i>Syracuse</i>	<i>Banzi</i>	<i>Agrinion</i>	<i>Riccia</i>	<i>Maserà</i>
7. C. Val C. f Flac		2	2			40	15
8. M. Auf Rus						2	
9. L. Iuli	1					14	12
10. L. Atili Nom						1	
11. C. Titini				1		6	1
12. P. Paetus <sup>40</sup>		1	4	2	1	43	17
13. Sex. Po(m) Fostlus <sup>41</sup>			6	5		91	21
14. Ti. Vet			2			60	3
15. M. Baebi Q. f Tampi(l)			8	12	1	170	58
16. Cn. Lucr Trio <sup>42</sup>			2	8	1	121	23
17. L. Antes Grag <sup>43</sup>			13	7	5	162	73
18. C. Serveili M. f			4	4	2	52	29
19. C. Cur f Trig(e) <sup>44</sup>				1		6	3

<sup>40</sup> The evidence of the Petacciato and Pachino hoards, lacking nos. 13–16 of this table, makes it clear that X re-emerged as mark of value after the use of XVI. Compare the re-appearance of X after the use of ✱ on the issues of L. Antestius Gragulus and C. Serveilius M. f.

<sup>41</sup> The heterogeneous nature of this and the next three issues makes it difficult to determine their relative order. All, however, appear to be earlier than those of L. Antestius Gragulus and C. Serveilius M. f. Those of Fostlus and Trio, with conventional heads of Roma, cannot be placed immediately before that of C. Curvatus f Trigeminus (see below) and also differ considerably in style and fabric from the series with ✱ as mark of value, beginning with the denarii of Ti. Minucius C. f Augurinus. That part of the issue of M. Baebius Tampilus which closely resembles the denarii of C. Serveilius M. f seems in every respect simpler and earlier. The bronze of Ti. Veturius is closer to that of C. Valerius Flaccus and Sex. Pompeius Fostlus than to any of the later groups.

<sup>42</sup> The presence on both obverse and reverse of a border consisting of a line and dots is curious and unexplained.

<sup>43</sup> The issues of L. Antestius Gragulus and C. Serveilius M. f seem to go very closely together as the latest in the Syracuse hoard. Both adopting ✱ as mark of value, their bronze is identical in style and fabric and is alone in this period in being of a very light weight.

<sup>44</sup> Considerations of style indicate clearly that specimens with obverse TRIGE are not hybrids, but genuine variants.

	<i>Petacciato</i>	<i>Pachino</i>	<i>Syracuse</i>	<i>Banzi</i>	<i>Agrinion</i>	<i>Riccia</i>	<i>Maserà</i>
20. L. Tre(bani)				1	1	20	6
21. C. Aug <sup>45</sup>				2		24	8
22. Ti. Minuci C. f Augurini				2 <sup>46</sup>	2	46	13
23. C. Aburi Gem				2		28	11
24. P. Mae Ant				7	2	63	15
25. C. Numitori						1	1
26. P. Calp						23	8
27. L. Minuci(u)						39	15
28. M. Marc <sup>47</sup>				3		69	21
29. M. Aburi Gem					1	64	25
30. L. Post Alb						28	4
31. L. Opeimi						30	4
32. M. Opeimi					1	32	3
33. M. Acilius M. f				2		25	7
34. Q. Mete						41	7
35. M. Varg						65	17
36. Sex. Iuli Caesar						7	2
37. Q. Pilipus					1	78	3
38. T. Clouli <sup>48</sup>						50	1
39. Cn. Dom						42	5
40. Anonymous with elephant's head						4	3
41. M. Metellus Q. f						36	4

<sup>45</sup> The form of spike on the helmet on this issue differs from that on the two preceding issues, but its association with them is assured by the close similarity among the bronze of the three. The border of dots on the reverse, used only sporadically in the series to which this issue belongs (nos. 30 and 37 are the other issues where it occurs), presumably derives from the issue of C. Serveilus M. f.

<sup>46</sup> The brockage in the Banzi hoard is a piece of Ti. Minucius C. f Augurinus.

<sup>47</sup> The third member of this triumvirate was probably M. Fabrinus, who struck only bronze.

<sup>48</sup> The type of T. Cloulius is clearly a crude copy of that of C. Serveilus M.f.

	<i>Petacciato</i>	<i>Pachino</i>	<i>Syracuse</i>	<i>Banzi</i>	<i>Agrinion</i>	<i>Riccia</i>	<i>Maserà</i>
42. C. Serveil <sup>49</sup>						1	
43. Q. Max							1
44. N. Fabi Pictor						7	1
45. C. Cassi						68	10
46. T. Q.						36	4
47. C. Metellus							4
48. M. Porc Laeca <sup>50</sup>							4

<sup>49</sup> Mommsen held (*Sitzungsberichte der königlich preussischen Akademie der Wissenschaften zu Berlin*, 1883, 1152) that the denarius of C. Serveilius reported from the Riccia hoard was really a piece of C. Serveilius M. f and that the issue was not struck until after the deposition of the Maserà hoard. However, it would be extremely difficult to confuse an issue of C. Serveilius with that of C. Serveilius M. f and Mommsen's theory would involve splitting a more than probable triumvirate.

<sup>50</sup> Note that the head on the denarii of M. Porcius Laeca has only two locks of hair falling down the neck, a feature shared by specimens of Mn. Acilius Balbus.

We should like to thank Margaret Thompson for entrusting the discussion of the denarii in the Agrinion hoard to us and Harold B. Mattingly for valuable comment and criticism.

## PLATES





# SICYON



## SICYON



ARGOS: 49-56. CHALCIS: 57-68.



IV



CHALCIS

V



CHALCIS

VI



CHALCIS: 106-117. HISTIAEA: 118-122. BOEOTIA: 123-128.



**BOEOTIA: 129-133. PHOCIS: 134. LOCRI: 135-149. AENIANES: 150-151.**

# VIII



LAMIA: 152-155. OETA: 156. THESSALIAN LEAGUE: 157.  
BOEOTIAN LEAGUE: 158-160. AEGINA: 161. ATHENS: 162-164.



165



166



167



169



170



171



ATHENS



X



172



173



174



175a



175b



176



ATHENS

XI



177



178



179



180



181



182



ATHENS



XII



183a



183b



184



185



186



187



ATHENS



188



189



190



191a



191b



192



ATHENS

**XIV**



**193**



**194**



**195**



**196**



**197**



**198**



**ATHENS: 193-197. CYME: 198.**



MEGALOPOLIS

# XVI



## MEGALOPOLIS



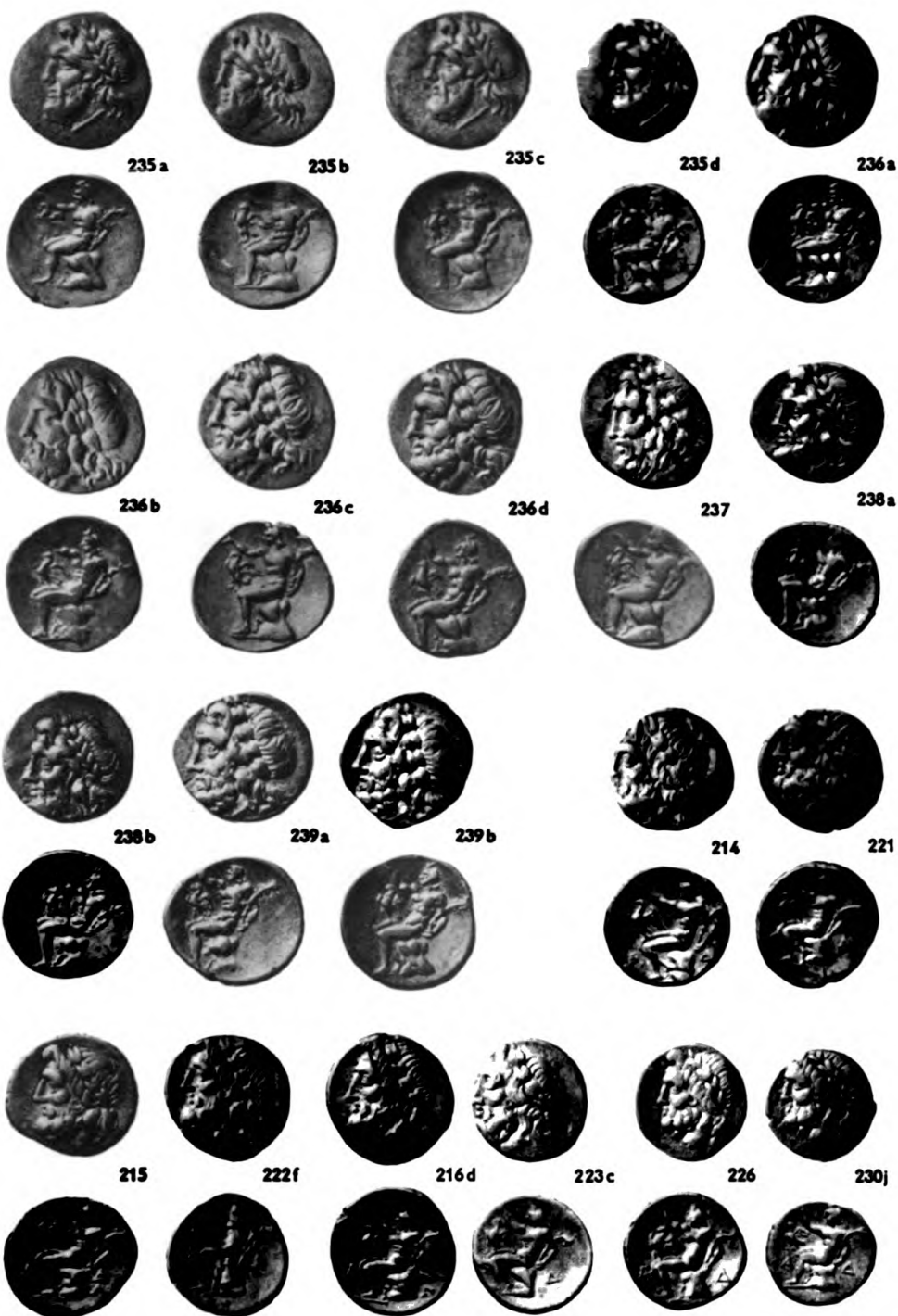
## MEGALOPOLIS



# XVIII



## MEGALOPOLIS



## MEGALOPOLIS

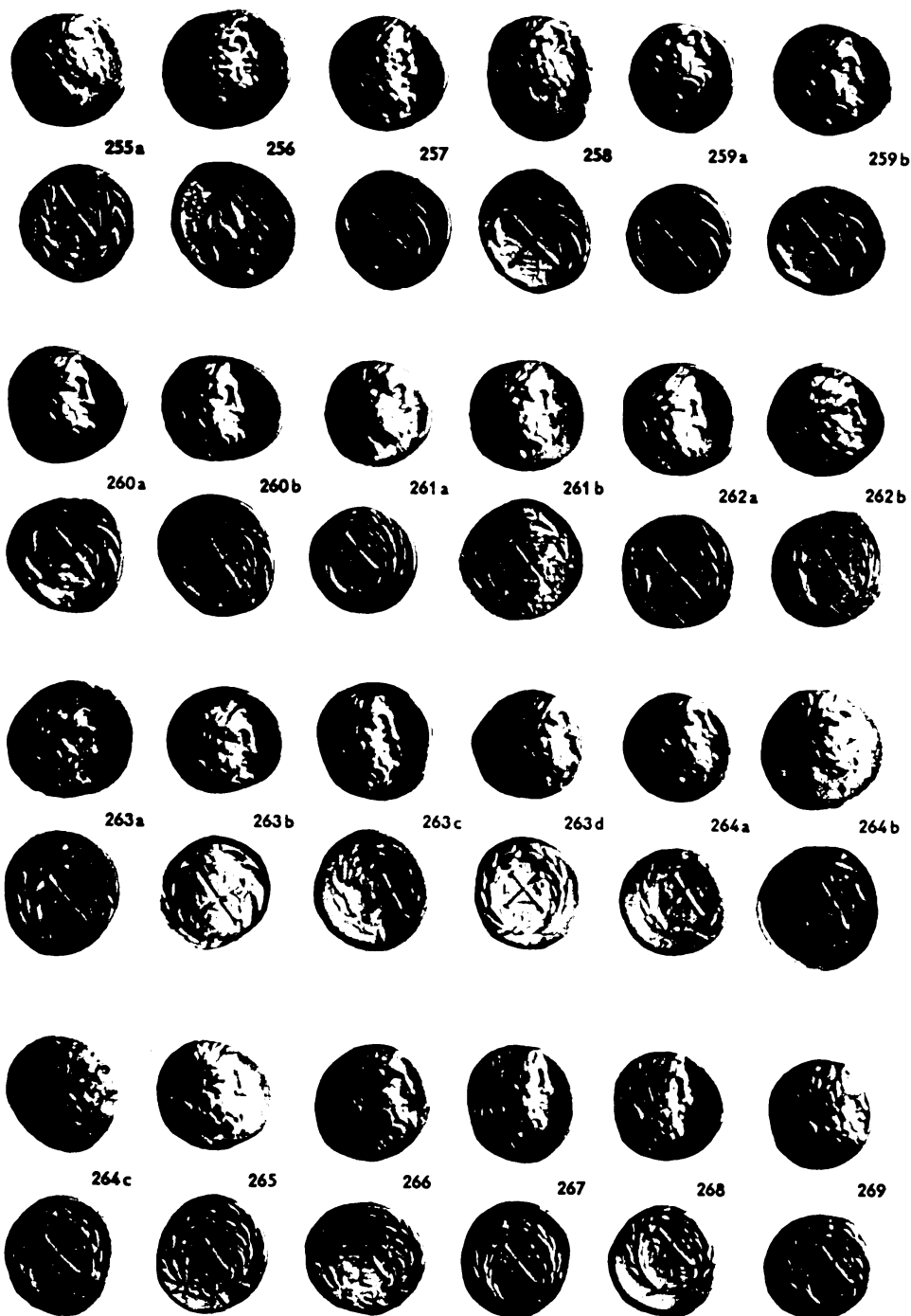


XX



# ACHAEAN LEAGUE (EARLY)

Corinth: 240–242; Sicyon: 243–250; Patras: 251–254.



## ACHAEAN LEAGUE (EARLY)

Patras



ACHAEAN LEAGUE (EARLY)

Patras



## ACHAEAN LEAGUE (EARLY)

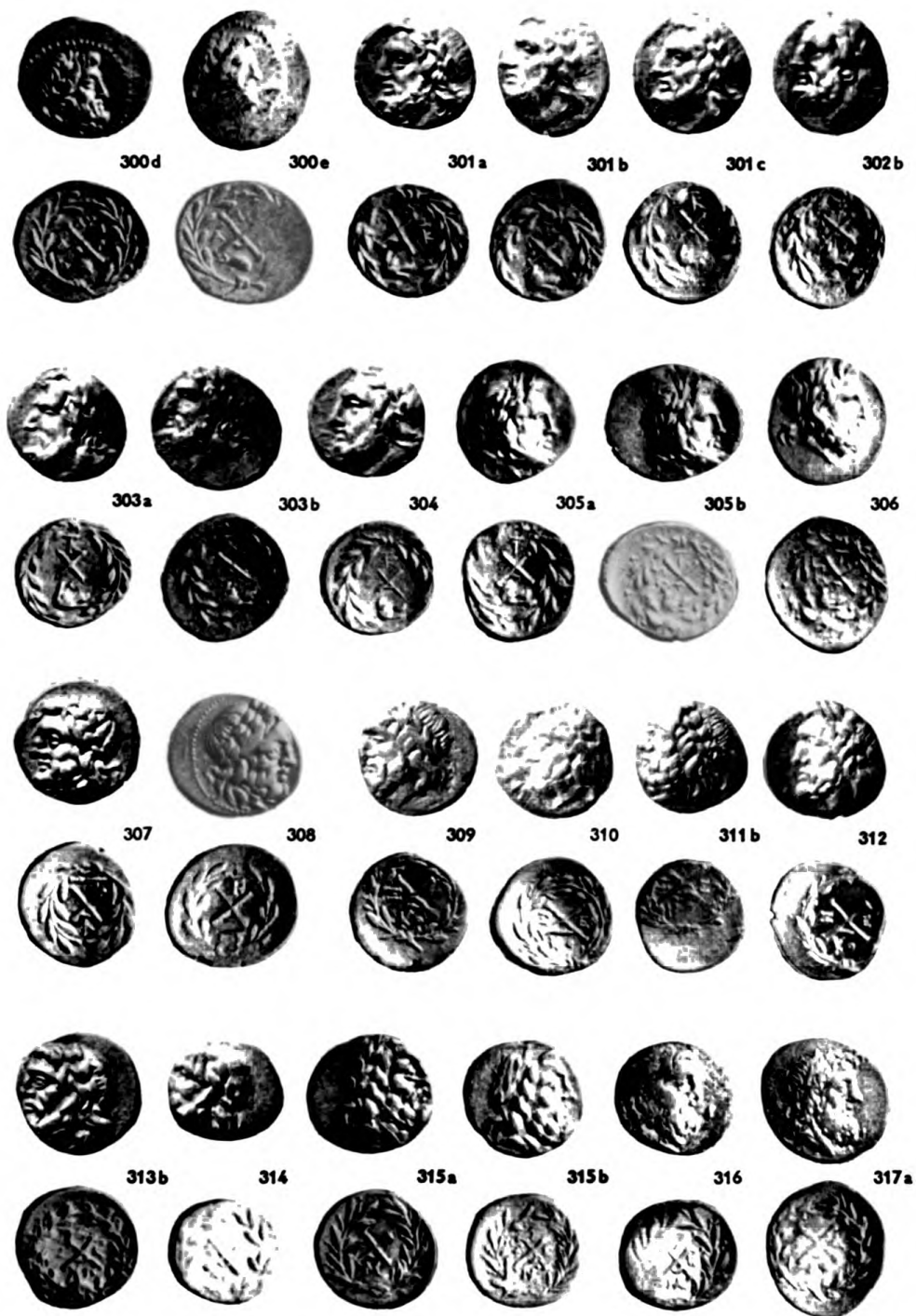
Patras

XXIV



ACHAEAN LEAGUE (EARLY)

Patras



### ACHAEAN LEAGUE (EARLY)

Patras: 300; Argos: 301–308; Corone: 309–312; Messene: 313–317.

# XXVI



## ACHAEAN LEAGUE (EARLY)

Messene



## ACHAEAN LEAGUE (EARLY)

Messene: 326–329; Elis: 330–338.

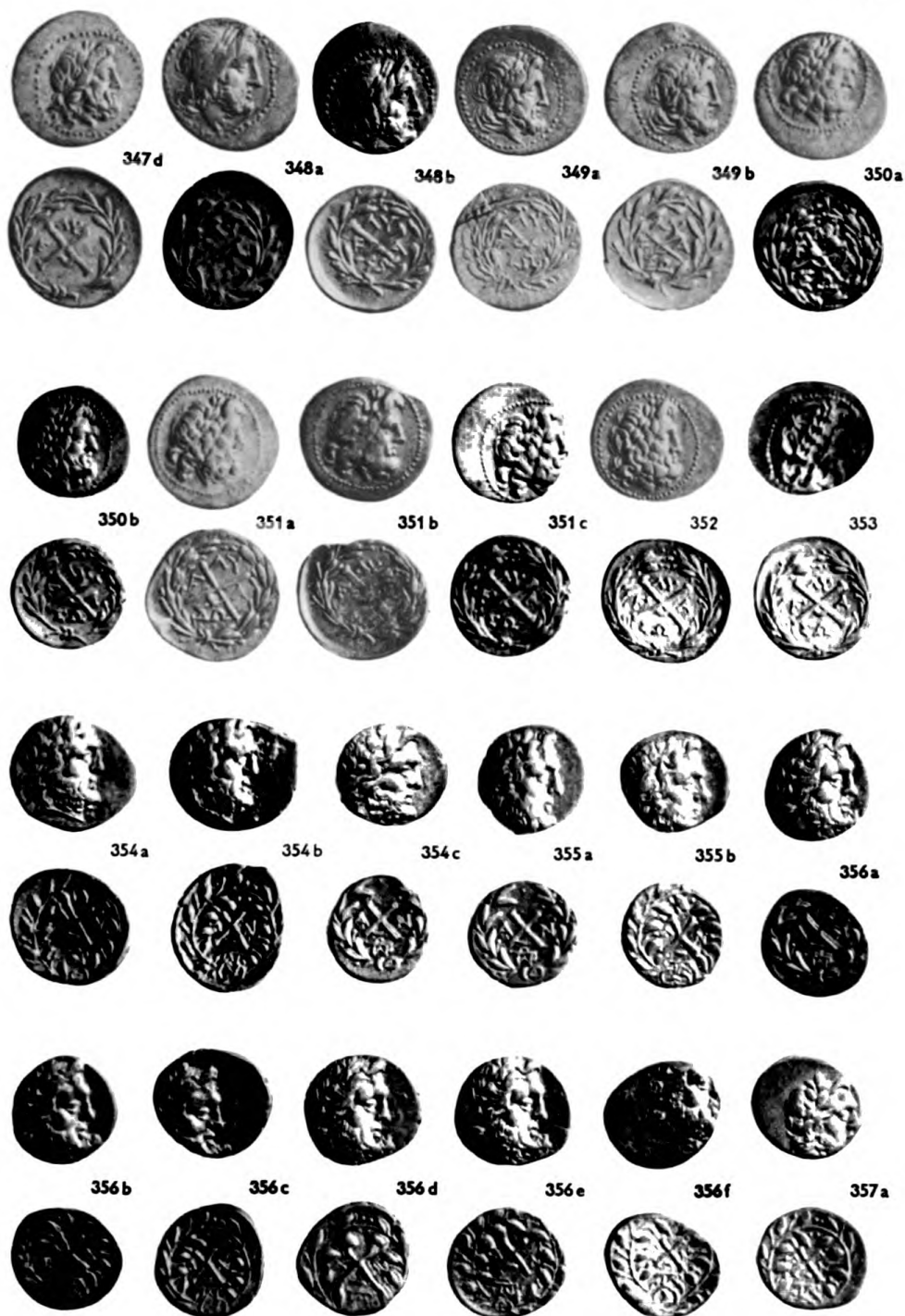


XXVIII



ACHAEAN LEAGUE (EARLY)

Elis



## ACHAEAN LEAGUE (EARLY)

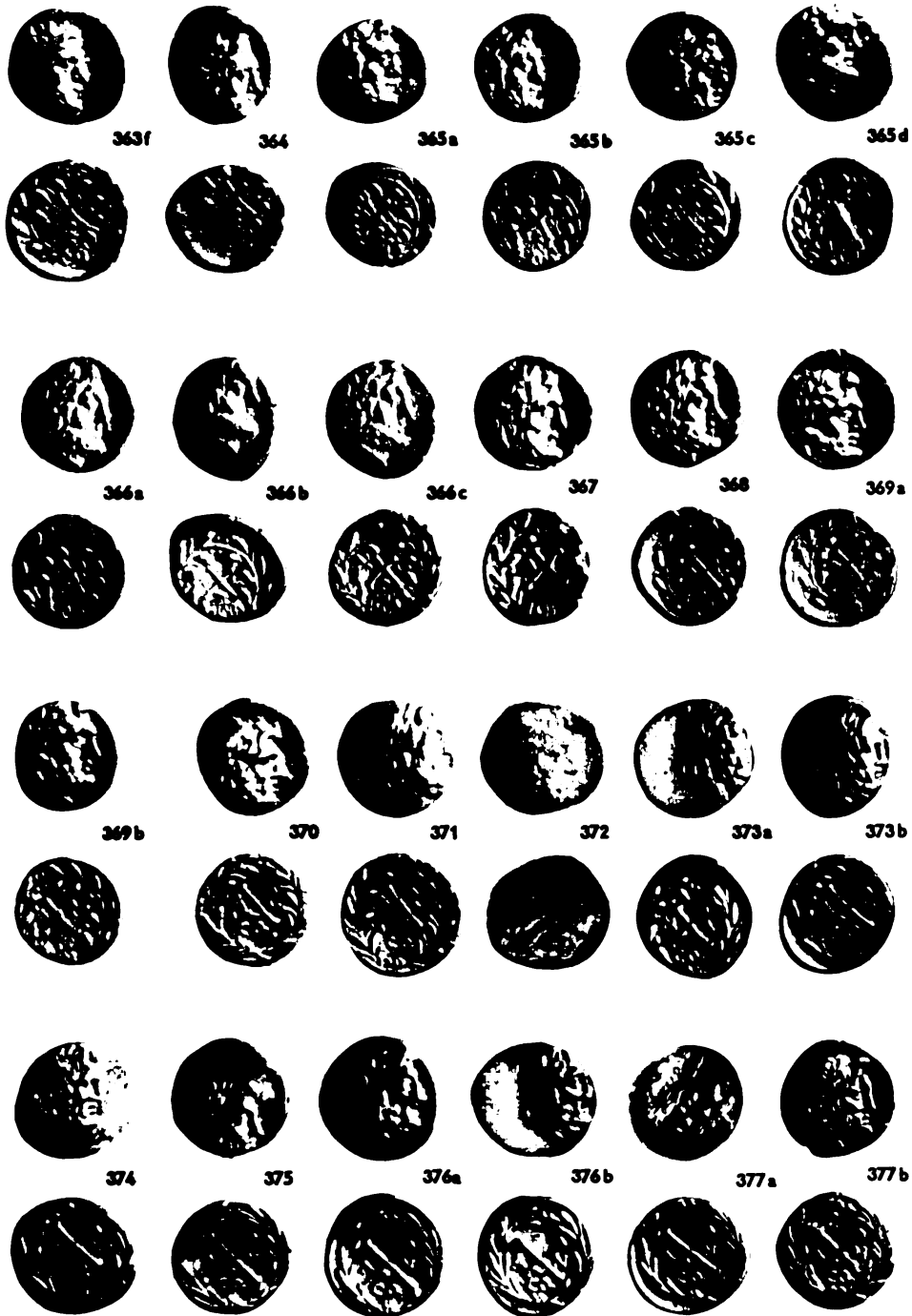
Elis: 347–353; Antigoneia: 354–357.

XXX



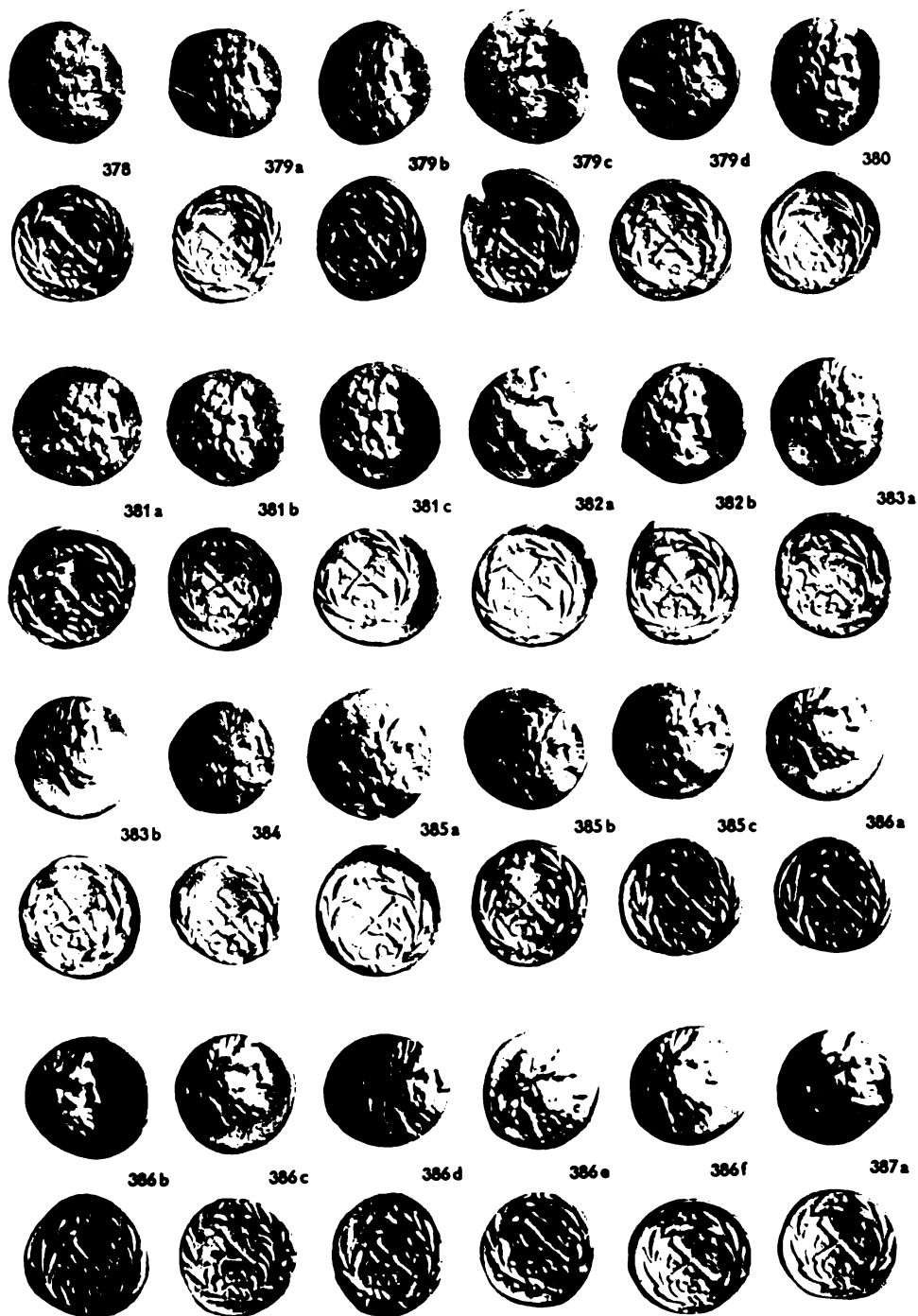
ACHAEAN LEAGUE (EARLY)

Antigoneia



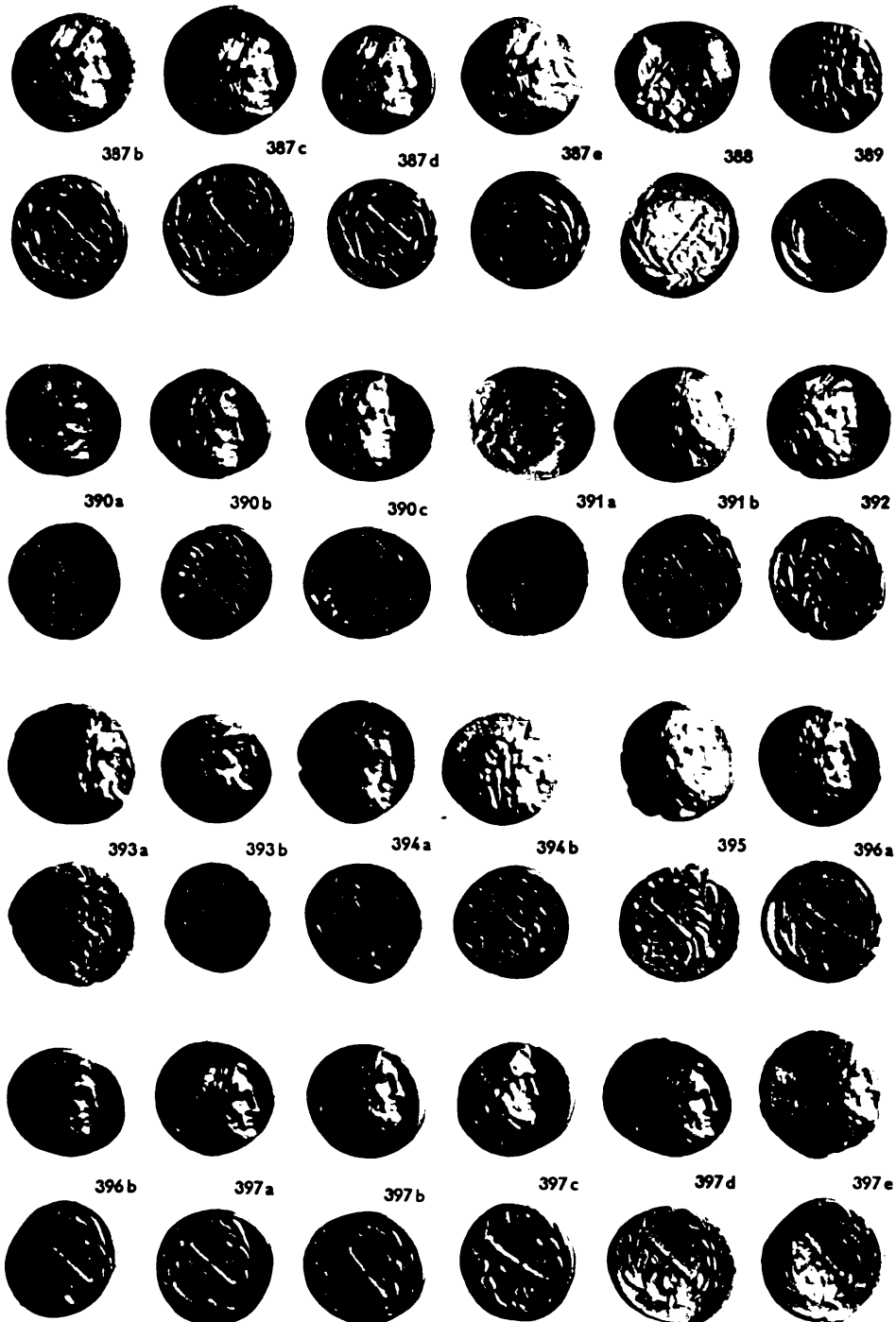
ACHAEAN LEAGUE (EARLY)

Antigoneia



ACHAEAN LEAGUE (EARLY)

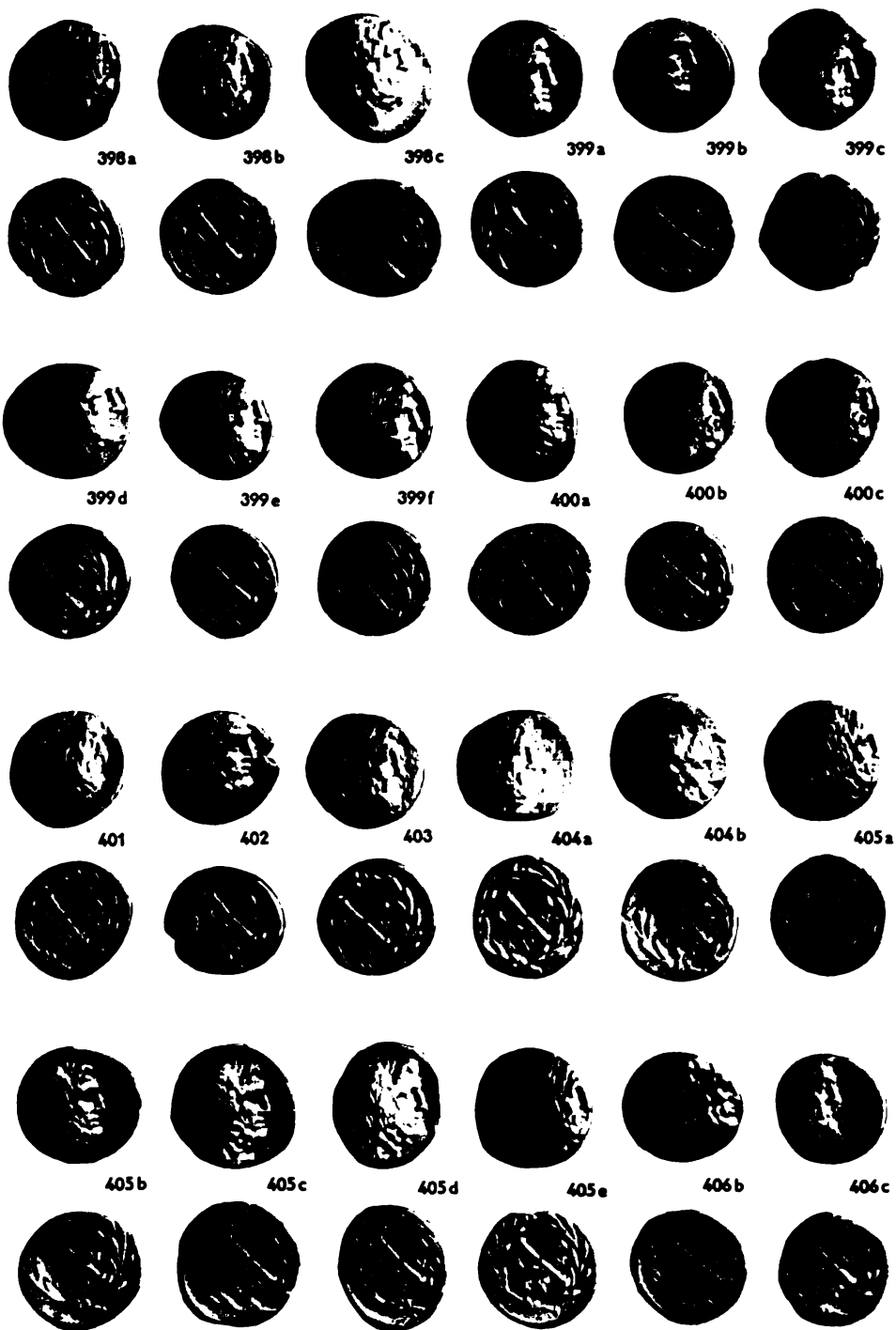
Antigoneia



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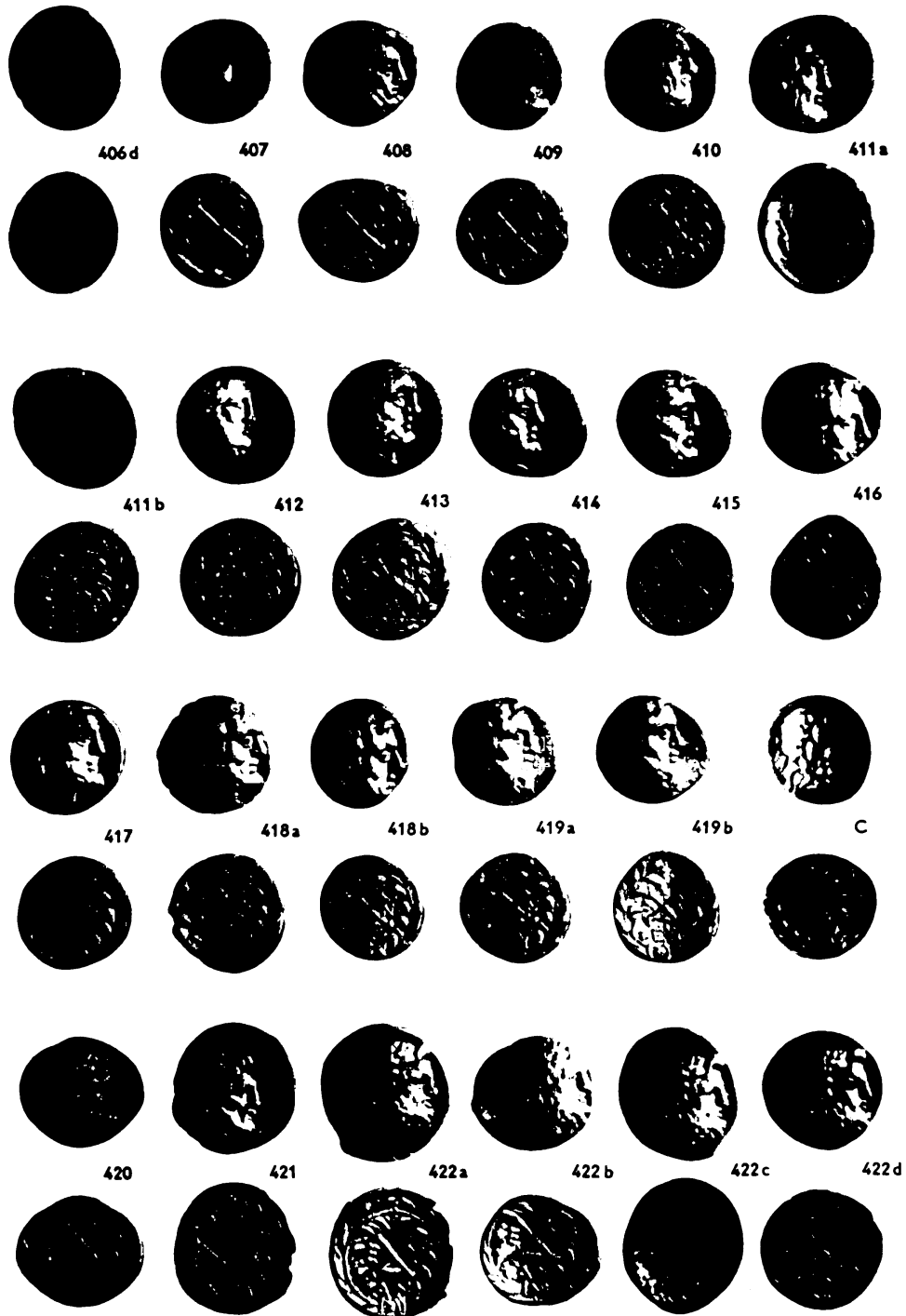
Antigoneia

XXXIV



ACHAEAN LEAGUE (EARLY)

Antigoneia



ACHAEAN LEAGUE (EARLY)

Antigoneia

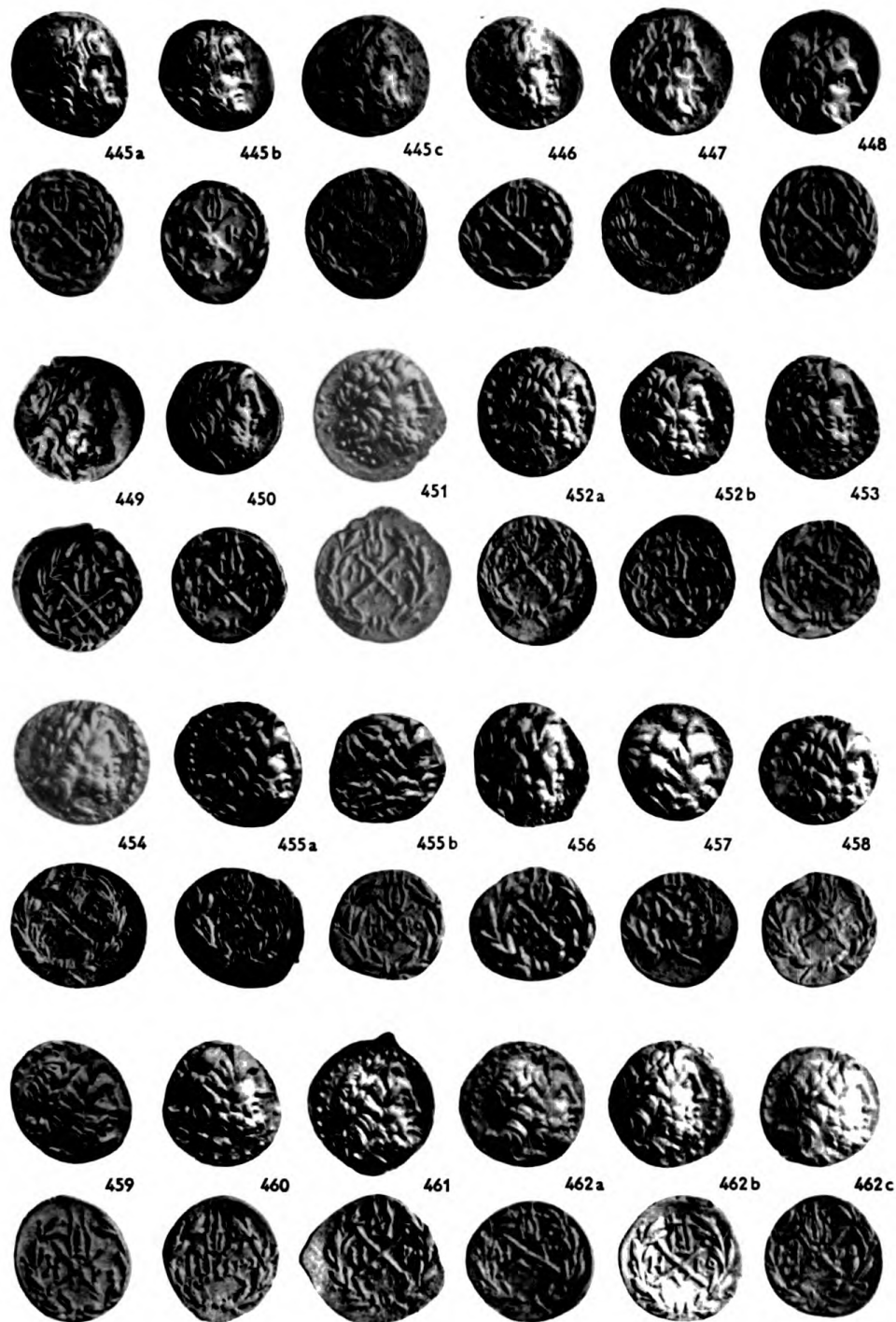


XXXVI



ACHAEAN LEAGUE (EARLY)

Megara



## ACHAEAN LEAGUE (EARLY)

Megara

XXXVIII



ACHAEAN LEAGUE (EARLY)

Megara: 463–465; Megalopolis: 466–467; Sparta: 468; Uncertain: 469–470.

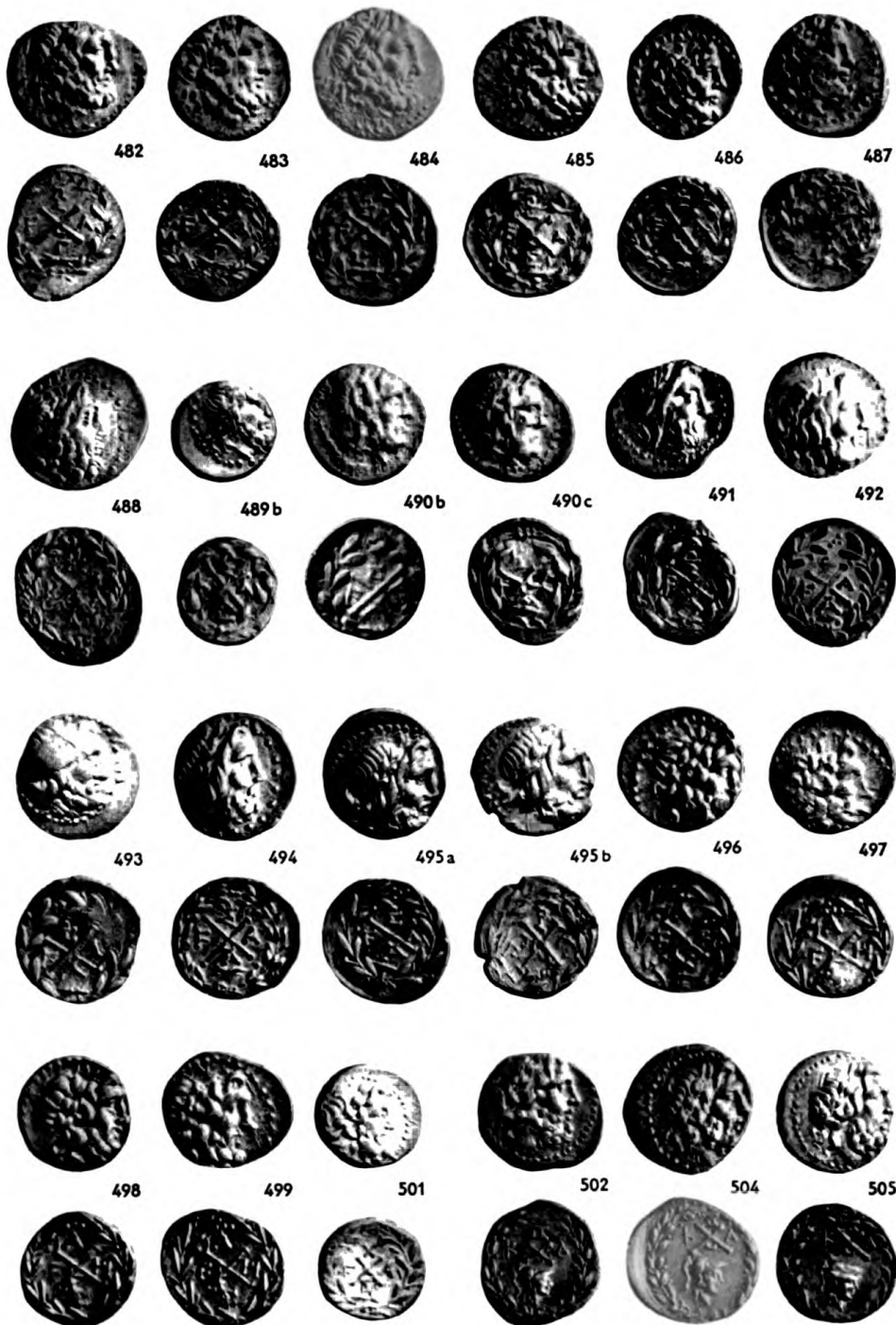
ACHAEAN LEAGUE (LATE)

Megalopolis: 471–472.



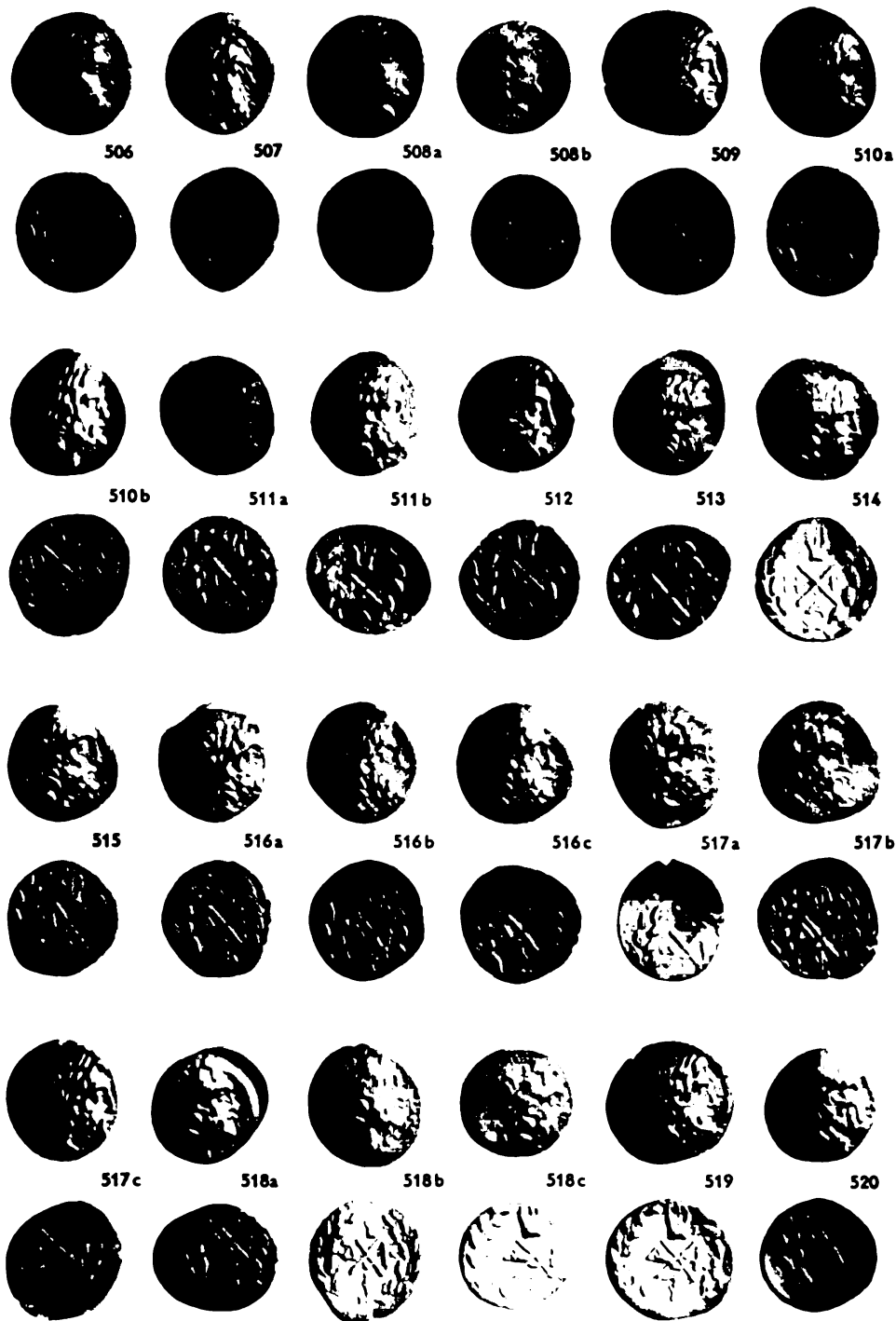
ACHAEAN LEAGUE (LATE)  
Megalopolis: 472–474; Elis: 476–481.

XL



ACHAEAN LEAGUE (LATE)  
Elis: 482-501; Caphyae: 502-505.

XLI



ACHAEAN LEAGUE (LATE)

Megara

XLII

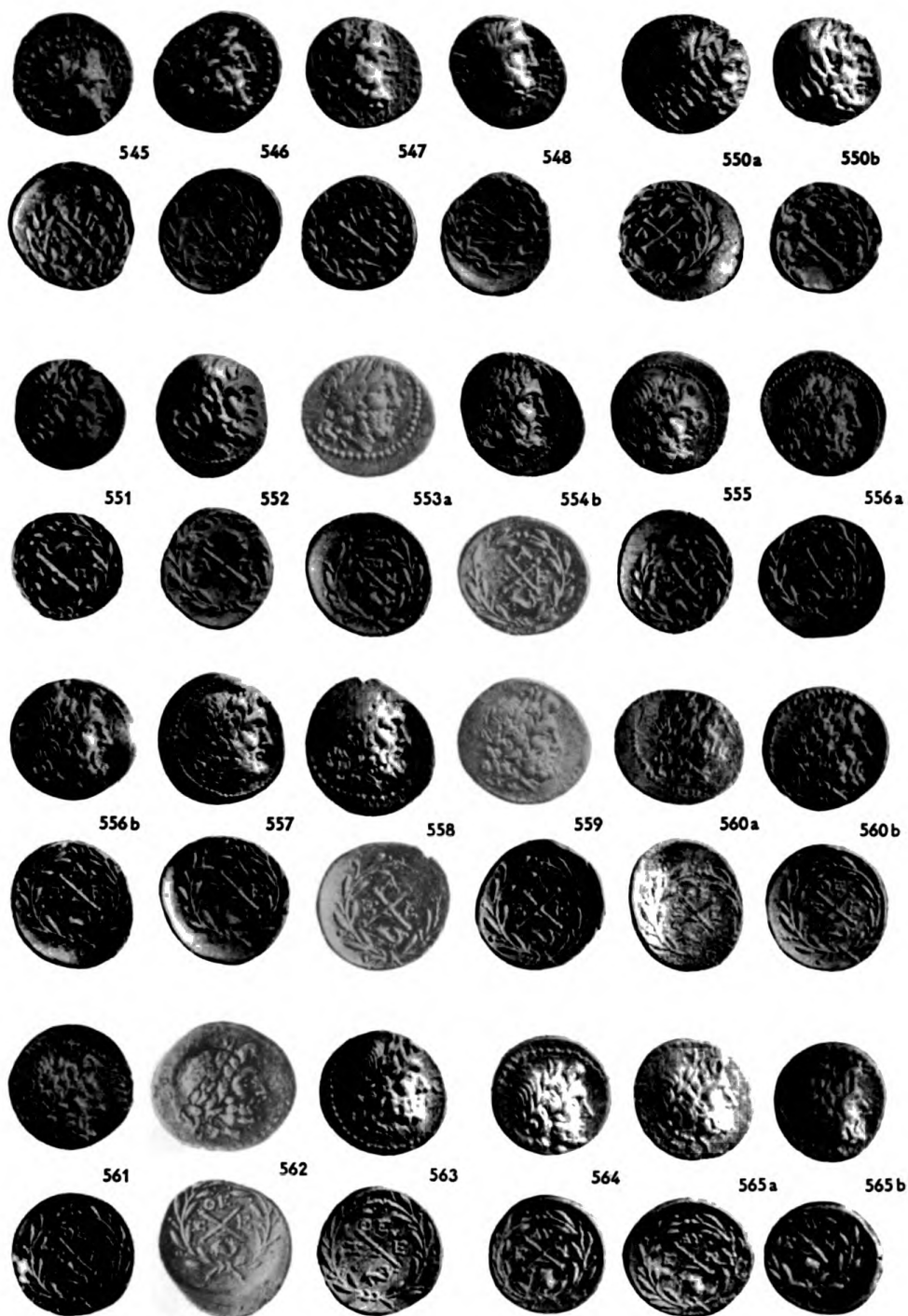


ACHAEAN LEAGUE (LATE)

Megara: 521–528; Pheneus: 531–533; Pellene: 534–537;

Epidaurus: 538–542; Cleitor: 543; Aegium: 544.





## ACHAEAN LEAGUE (LATE)

Aegium: 545–548; Patras: 550–563; Dyme: 564–565.

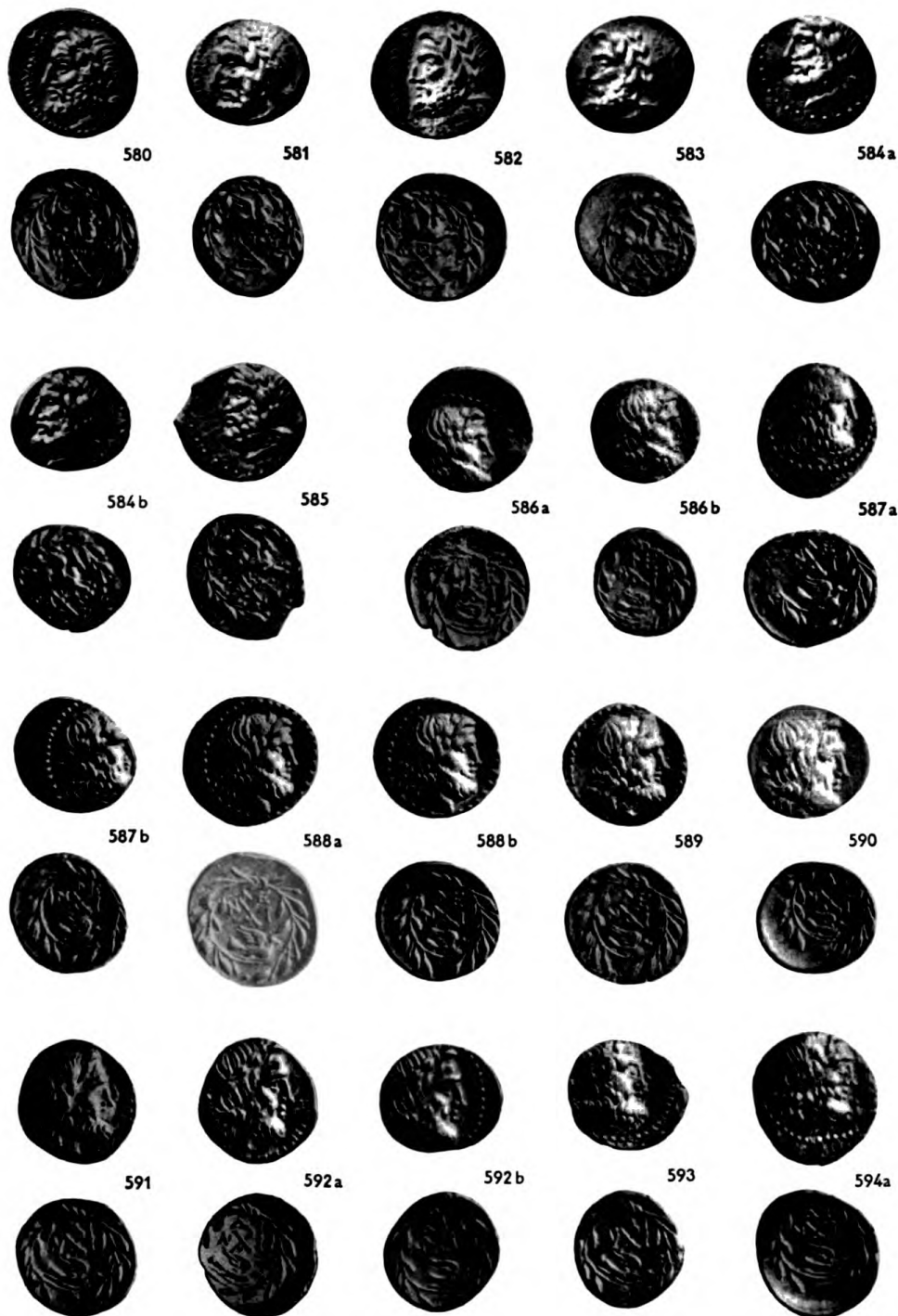


XLIV



ACHAEAN LEAGUE (LATE)

Dyme: 567; Aegira: 568–577; Corinth: 579.



ACHAEAN LEAGUE (LATE)

Corinth: 580–585; Sicyon: 586–594.

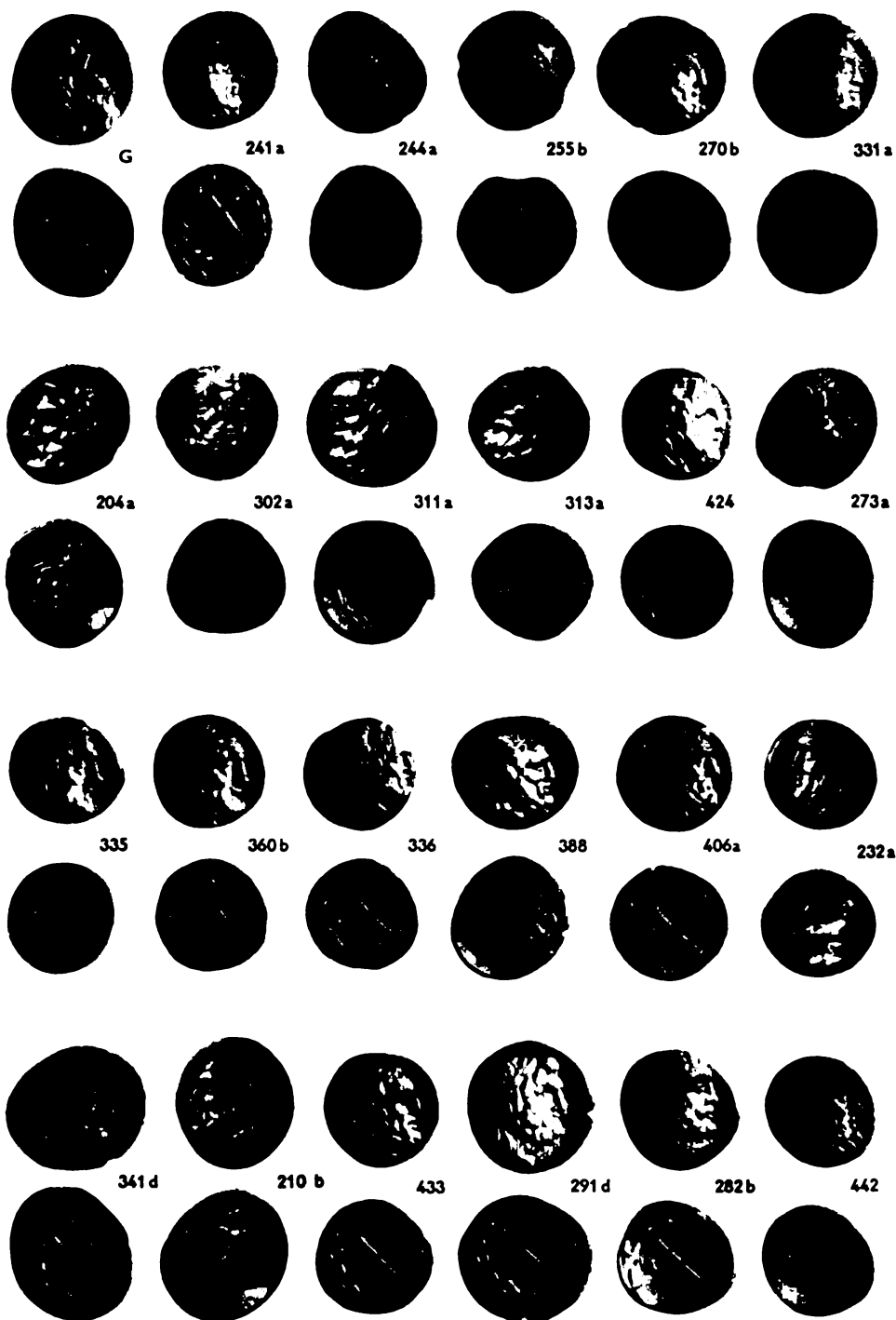
XLVI



ACHAEAN LEAGUE (LATE)

Sicyon: 594–600; Argos: 601–605; Messene: 606–608.

MESSENE: 609.



ACHAEAN LEAGUE AND MEGALOPOLIS  
Stylistic Comparisons

# XLVIII

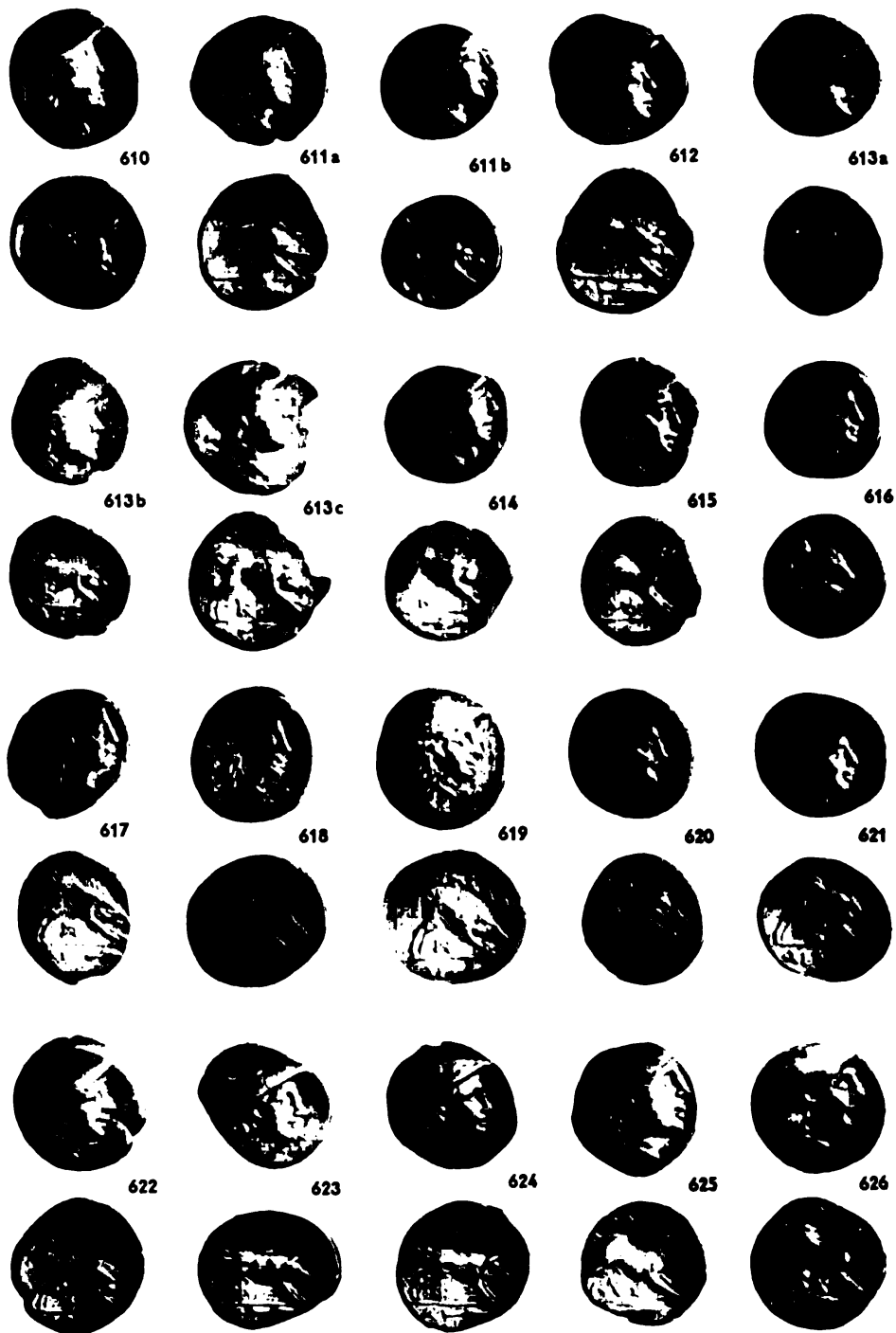


## ACHAEAN LEAGUE AND MEGALOPOLIS Stylistic Comparisons



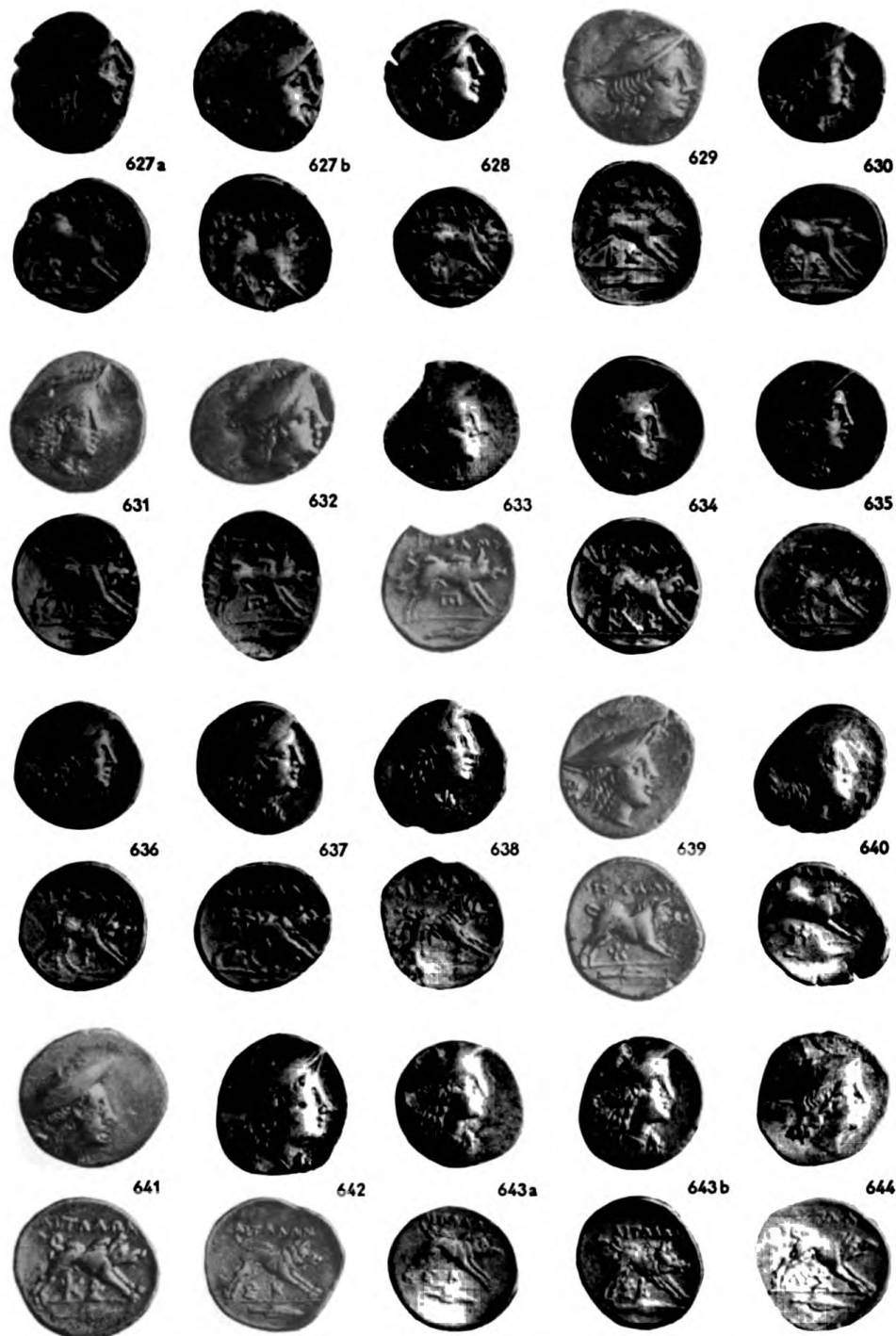
ACHAEAN LEAGUE AND MEGALOPOLIS  
Stylistic Comparisons

L



AETOLIA

LI



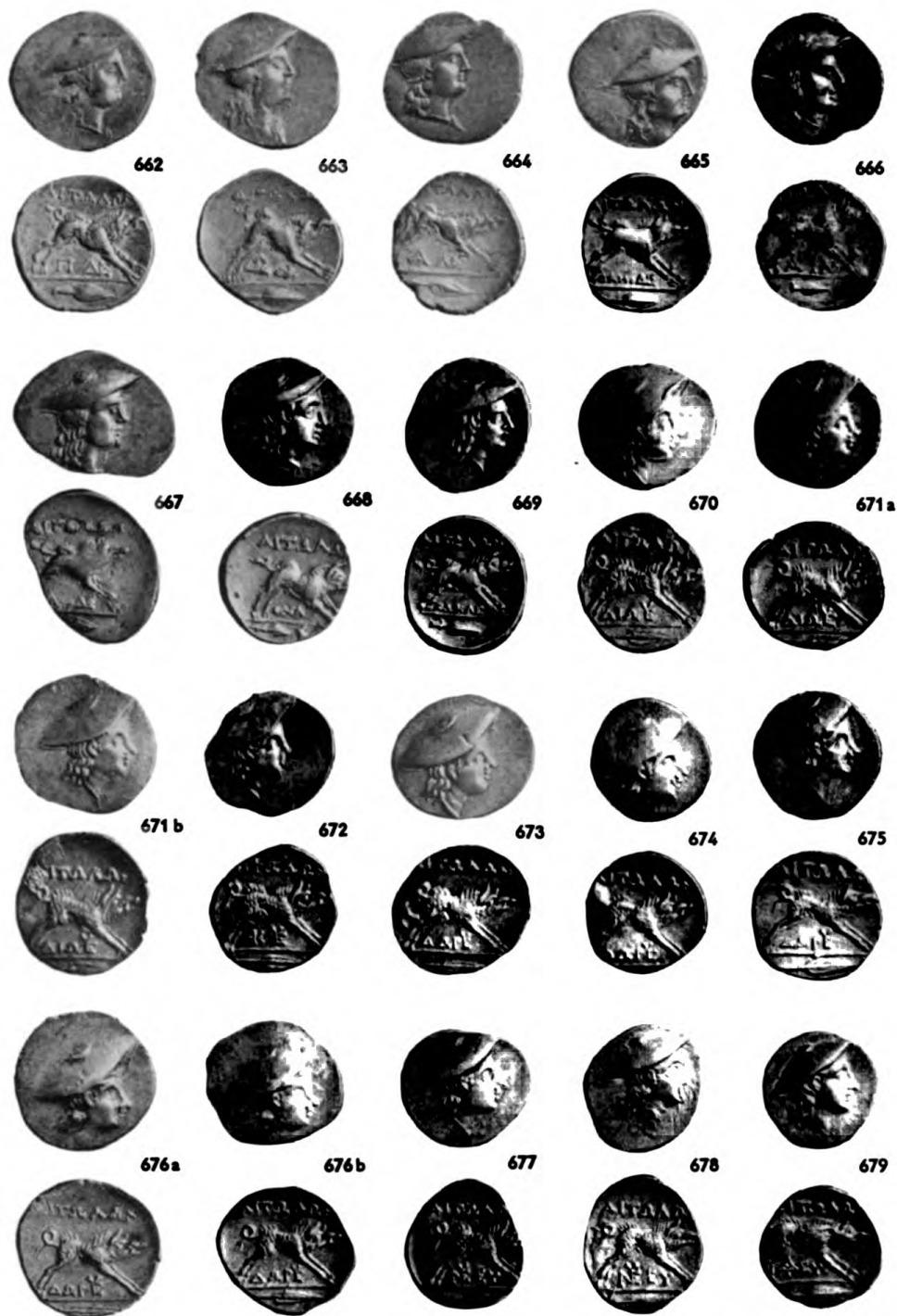
AETOLIA



LII



AETOLIA



AETOLIA

LIV



DENARII

LV



693



694



695



696



697



698



699



700



701



702



703



704



705



DENARII

LVI



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708



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710



711



712



713



714a



714b



715



716



717



DENARII









CJ  
35  
.N9  
no. 160

NUMISMATIC NOTES AND MONOGRAPHS

No. 160

# THE COINAGE OF THE ARAB AMIRS OF CRETE

By GEORGE C. MILES



THE AMERICAN NUMISMATIC SOCIETY  
NEW YORK

1970



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NEW YORK, N. Y., 10032

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NUMISMATIC NOTES AND MONOGRAPHS

*Number 160*



# The Coinage of the Arab Amirs of Crete

By GEORGE C. <sup>Arpenter</sup> MILES



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## PREFACE

Until seventeen years ago our only knowledge of the Amirs of Crete, the obscure Arab dynasty that ruled that great island for about one hundred and thirty-five years, derived from scattered references in the Arab and Byzantine chronicles. No archaeological remains or artifacts of any sort relating to the Amirs were known until in the year 1953 the late John Walker, Keeper of the Department of Coins and Medals at the British Museum, proposed to assign a handful of gold and copper coins, previously misattributed, to these Arab "pirates." In a little article entitled "The Coins of the Amirs of Crete,"<sup>1</sup> Walker assembled about 15 specimens chiefly from the numismatic literature of the last century, and, basing his assumption partly on the presence of the name Shu'ayb and partly on provenance, astutely concluded that these coins belonged to the family of Abū-Haṣṣ 'Umar b. Shu'ayb who ruled over Crete from A.D. 827 or 828 until the reconquest of the island by Nicephoros Phocas in 961. This modest article resulted in the discovery of more coins and in the publication of several contributions which fully confirmed Walker's attributions. The relevant bibliography, subsequent to Walker's article is as follows:

Bykov — A. Bykov, "Moneti emirov Krita v Ermitaje," *Soobshcheniya Gosudarstvennogo Ermitaja*, XIII (1958), pp. 65–67.

Miles, *Athenian Agora* — George C. Miles, *The Athenian Agora*, Vol. IX, *The Islamic Coins* (Princeton, 1962), pp. 20–21.

<sup>1</sup> *Numismatic Chronicle*, 1953, pp. 125–130, cited as Walker, NC 1953.



- "Circulation of Islamic Coinage" — "The Circulation of Islamic Coinage of the 8th–12th Centuries in Greece," *Congresso Internazionale di Numismatica, Roma 11–16 Settembre 1961*, Vol. II, *Atti* (Rome, 1965), pp. 485–498.
- "Crete" — "The Coinage of the Arab Amirs of Crete," *Proceedings of the Second Cretological Congress*, held in Khanya, 1966 (Athens, 1967), Vol. I, pp. 357–361.
- *D.O.Papers*, 18 — "Byzantium and the Arabs: Relations in Crete and the Aegean Area," *Dumbarton Oaks Papers*, 18 (1964), pp. 1–32 (esp. pp. 14–15 and 18).
- "Epigraphical Survey" — "Arabic Epigraphical Survey in Crete," *Year Book of the American Philosophical Society*, 1956, pp. 342–349.
- "Genealogy" — "A Provisional Reconstruction of the Genealogy of the Arab Amirs of Crete," *Κρητικά Χρονικά*, 15–16 (1961–1962), pp. 59–73 (*Proceedings of the First Cretological Congress*, Vol. 2).
- *Hesperia* 1956 — "The Arab Mosque in Athens," *Hesperia* XXV (1956), p. 344.
- *Κρητικά Χρονικά* 1955 — "A Recent Find of Coins of the Amirs of Crete," *Κρητικά Χρονικά*, 9 (1955), pp. 150–151.
- *Κρητικά Χρονικά* 1956 — "Coins of the Amirs of Crete in the Herakleion Museums," *Κρητικά Χρονικά*, 10 (1956), pp. 365–371.
- Welin, NC 1955 — Ulla S. Linder Welin, "The First Known Dirham of the Amirs of Crete," *NC* 1955, pp. 211–214.

In addition to the coins published or mentioned in these articles I have since about 1955 been compiling a file of all the coins of the Amirs that have come to my attention, including those in publications predating Walker's article, in which the coins were either misattributed or not attributed at all, and those in unpublished collections or in the possession of individuals. Early in 1966 the recording of published and unpublished specimens had progressed to the

point where it seemed to me that a definitive publication, or at least an orderly presentation of the scattered material, was desirable. On the basis of the material then in hand I presented a brief summary of the contents of the corpus at the Second Cretological Congress held in Khana in April 1966. At that time the total number of coins in the corpus was 128. During the course of that visit to Crete additional specimens came to my attention both in Khanya and in Herakleion. In Herakleion I had the good fortune to meet Mr. Nikolaos Metaxas who kindly permitted me to examine his collection of coins, among which I found a number of examples of the coinage of the Amirs. He had not previously been aware of the existence of this class of coinage, but his interest in the field having been aroused Mr. Metaxas soon began to acquire more specimens as they were brought in to him from Herakleion itself and from other towns and villages in Crete. The very considerable growth of the corpus since the spring of 1966 is in large measure the result of my association with Mr. Metaxas. In May 1967 while conducting excavations in collaboration with the Greek Archaeological Service on a site near the Venetian church of San Pietro (Ag. Petros) in Herakleion, still more additions were made, many being further acquisitions by Mr. Metaxas, others seen and not previously recorded in the Archaeological and Historical Museums in Herakleion, a few recovered in the Ag. Petros excavations. All these additions demanded a complete rewriting of the 1966 draft of the corpus, and as of the time of what I had hoped would be the final revision in November 1967 the recorded number of coins had grown to 234. For several reasons the "final revision" was put off until March 1970. Meanwhile, in February of that year, I had made another brief visit to Crete during which I was able to record 30-odd additional specimens, thanks to Mr. Manolis Borboudakis, Ephor for Byzantine and Mediaeval Antiquities in Crete,

who had thoughtfully set aside for my eventual examination coins brought in by villagers, and to Mr. Metaxas, who had acquired a number of specimens since my last visit and who had faithfully taken note of the provenance of each specimen. The total in the corpus now is 268, not, to be sure, a very impressive total but at least an eighteen-fold increase over Walker's record when he first identified the series in 1953.

## CLASSIFICATION OF THE COINS

While I am still quite uncertain about many aspects of the chronological arrangement of the coins and the identity of several of their issuers, the present illustrated publication may serve the useful purpose of bringing still more specimens to light and perhaps thereby providing additional information of eventual use in arriving at a more definitive arrangement of the coins. This in turn may result in a more acceptable reconstruction of the chronology and genealogy of the dynasty than those tentatively offered by Walker and Mrs. Welin and by me at the First Cretological Congress and at the Dumbarton Oaks symposium in 1963 (published in *D.O. Papers*, 18, pp. 11-15).<sup>2</sup>

We are confronted with three major difficulties in establishing a firm chronological arrangement of the coins: 1) the fact that the copper coins, which constitute the bulk of the preserved coinage, are all undated and present relatively few stylistic differences; 2) the lack of any lapidary epigraphical remains of the Amirs; and 3) the extremely

<sup>2</sup> The definitive history of the Arab occupation of Crete, based on all the Arabic and Greek written sources and on the archaeological evidence, has yet to be written. This numismatic corpus is offered as a contribution toward such a history. The basic bibliography relating to the primary written source material and the commentary by modern historians will be found in the footnotes in Miles, *D. O. Papers*, 18, pp. 10-17, especially footnotes 45 and 50. To the references given there may be added: Aly Mohamed Fahmy, *Muslim Sea-Power in the Eastern Mediterranean from the Seventh to the Tenth Century A.D. — Studies in Naval Organization*, Tipografia Don Bosco (Alexandria, 1950); Farhat Dachraoui, "La Crète dans le conflit entre Byzance et al-Mu'izz," *Les Cahiers de Tunisie*, 1959, pp. 307-318; Hélène Ahrweiler, *Byzance et la Mer* (Paris, 1966). S. M. Imamuddin's "Cordovan Muslim Rule in Iqritish (Crete)," in *Journal of the Pakistan Historical Society*, 1960, pp. 297-312, adds nothing to the record.

fragmentary and in general unsatisfactory written historical testimony, both Arabic and Byzantine. To summarize very briefly what we know from the latter sources: the Greek historians give us the names of Apokhaps, Saipis, Babel, Zerkounis, Kouroupas and Anemas (Fig. 1); and from the Arab historians we have the names of Shu'ayb the Cordoban, of his son 'Isâ, of his grandson abū-Ḥafṣ 'Umar the conqueror of Crete, of his great-grandson abū-'Amr Shu'ayb, and of 'Abd al-'Azīz b. Shu'ayb, the last of the Amirs (Fig. 2). An isolated Arabic source<sup>3</sup> provides us with another genealogical tree: 'Umar (a gentleman with literary propensities taken captive in 961) son of 'Isâ, son of Muḥammad, son of Yūsuf, son of (?) abū-Ḥafṣ (Fig. 3).<sup>4</sup> The names in the Byzantine sources are not all recognizable, but Apokhaps is certainly abū-Ḥafṣ, Saipis undoubtedly Shu'ayb, Babel and Zerkounis probably abū-'Abdullāh and Zerkūn (but neither name occurs in the Arabic sources), and Kouroupas is certainly 'Abd al-'Azīz (Fig. 4). Anemas does not come into consideration as he did not rule but was taken prisoner by Nicephoros Phocas and died in 972 fighting on the Byzantine side against the Russians.

As for dates, we know from the written sources that abū-Ḥafṣ 'Umar conquered Crete about 213 H./A.D. 828 and that he was still alive in 238 H./A.D. 852-3; that Saipis evidently ruled during the period of Michael III (A.D. 842-867) and may still have been alive in A.D. 875; that Babel was contemporary with Leo VI the Wise (A.D. 886-912); that Kouroupas was taken captive by Nicephoros Phocas in 961; that the writer 'Umar was alive after 350 H./A.D. 961; and that Anemas, as mentioned above, died in 972. Then we have the few dates provided by the dinars and

<sup>3</sup> Al-Ḥimyari: see E. Lévi-Provençal, "Une description arabe inédite de la Crète," *Studi orientalistici in onore di Giorgio Levi Della Vida*, II (Rome, 1956), p. 54.

<sup>4</sup> See figs. 5, 6 and 7 in Miles, "Genealogy," and figs. A, B, C and D in Miles, *D. O. Papers*, 18.

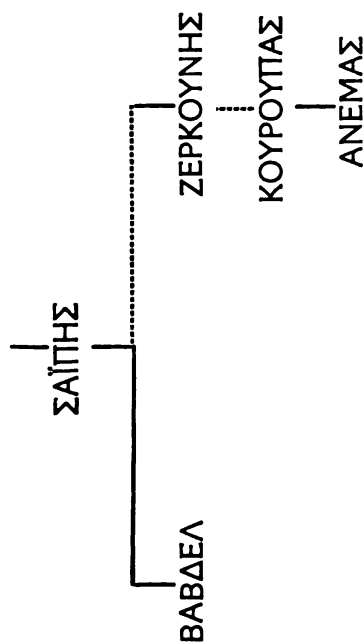


Fig. 1

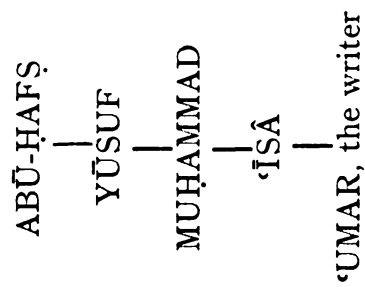


Fig. 3

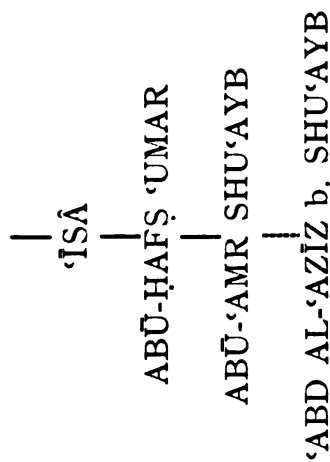


Fig. 2

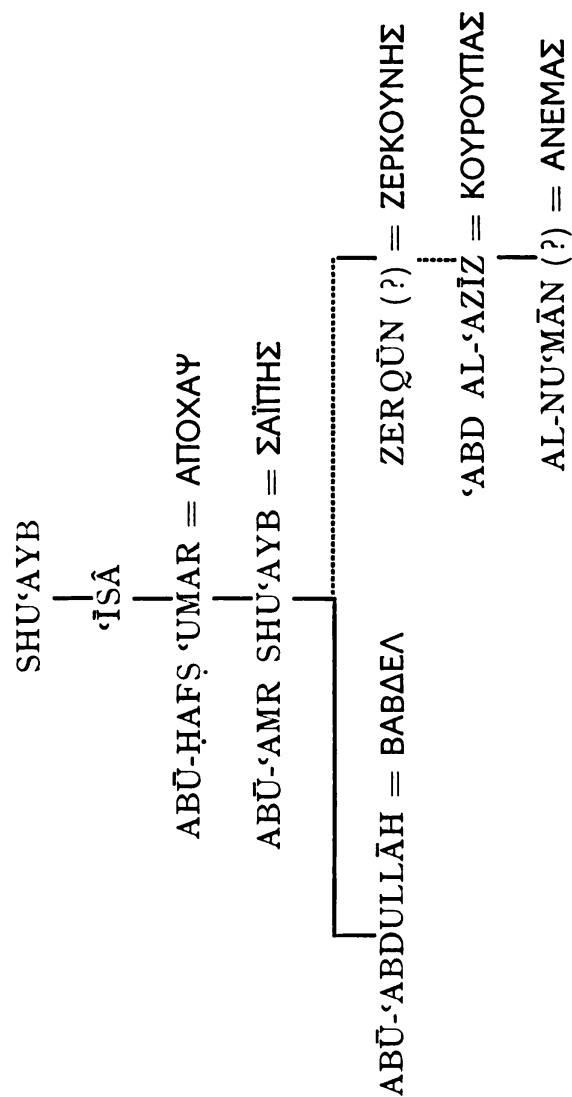


Fig. 4

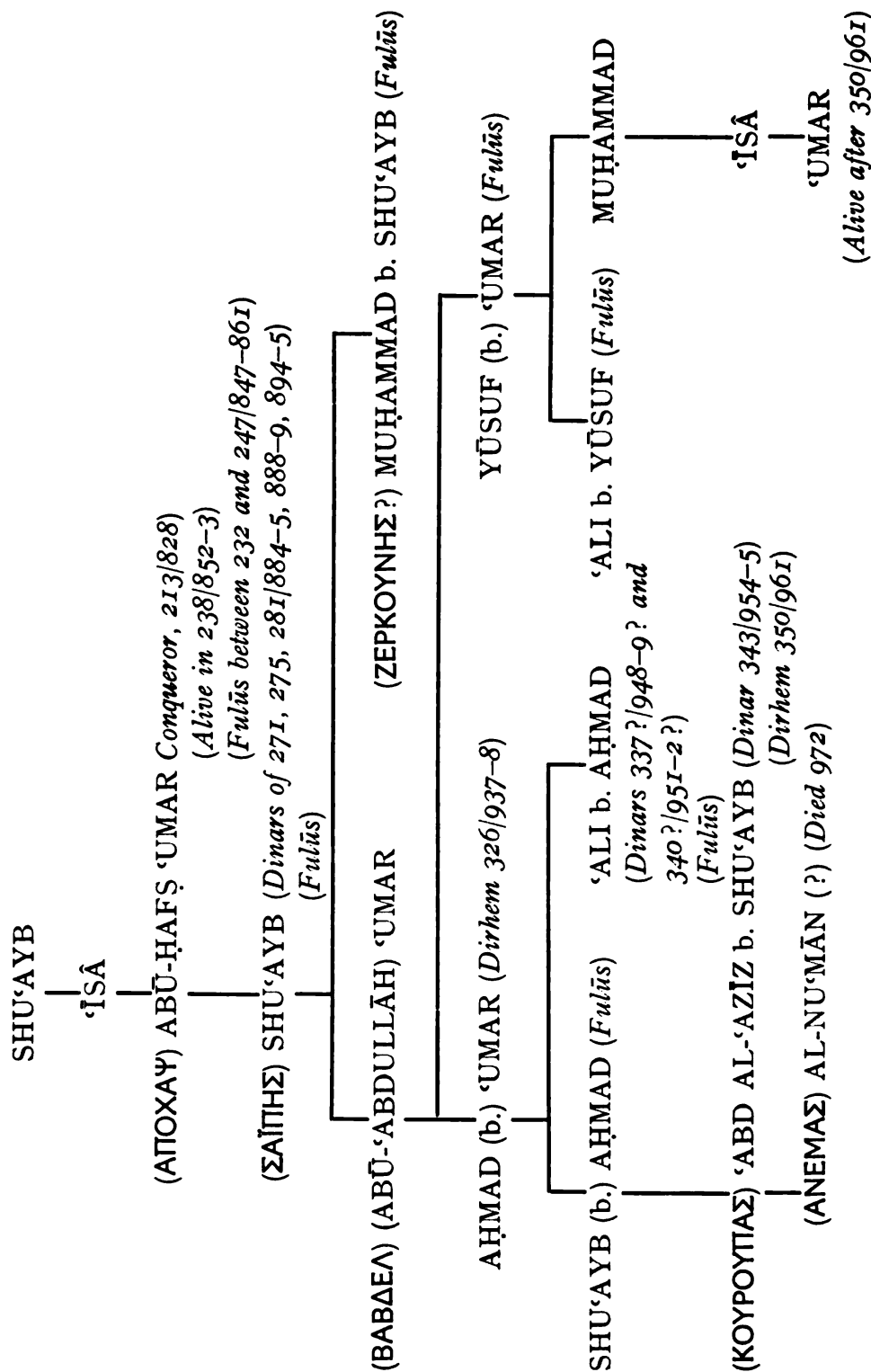


Fig. 5

dirhems which will be discussed in some detail below. In my articles in *Κρητικά Χρονικά*, 1961–62, and in *D.O.Papers*, 18 (1964), I presented a tentative genealogical tree attempting to account for all the names preserved in the written sources and on the coins known at that time.<sup>5</sup> This table, with some additions, is reproduced in Fig. 5. I have perhaps been over-zealous in trying to make all these names fit into one familial and dynastic table, and I am even less confident today than I was in 1961 about the reliability of this genealogy. In *Κρητικά Χρονικά*, 1961–62 (pp. 69–71) I wrote: “I would be the first to admit that in my effort to include all the names appearing on the coinage I may have created more Amirs of Crete than ever existed. Before these recent numismatic discoveries we had at the most the names of five amirs; now we have eleven. I have had to do a lot of guess-work. A search among the Arabic historians and chroniclers for the new names—that is, the new names on the coins—has been uniformly unsuccessful. Among several possibilities of error in this genealogy are: the uncertainty that exists, where the word *bin* (“son of”) is lacking on the coin, as to which man is the father and which the son; whether in fact one is the son of the other (he might be unrelated, and simply a lieutenant); whether all are actually descendants of abū-Ḥafṣ; whether an individual named perhaps as heir apparent on the coinage ever succeeded to the rule; and whether (a disturbing thought) there may have been rival amirs on the island, minting coins independently and contemporaneously. Or, even more upsetting, might some of these individuals have come from beyond Crete, from Sicily, for example?” And in *D.O.Papers*, 18 (p. 15), I repeated these warnings and reservations and added, with reference to the possibility of rival amirs: “We

<sup>5</sup> Fig. 7 in the former article, fig. E in the latter. Neither of these tables takes into consideration the newly discovered copper coin of ‘Umar b. ‘Īsā (?) or the problematical dinar of 340 H.



have a hint in a few lines toward the end of Theodosios Diakonos' account of the reconquest that this may have been the case: in the last days of the siege of Khandaq, 'Cretans, *not* rulers of the land but inhabitants of crags and caves, descended from the mountains.' Their leader was Karamountes (ὁ Καραμούντης), 'the old man steeped in slaughter, the young dragon of olden days, the one who purposed through all his life to hold the Cretans in rein.'"

In Κρητικά Χρονικά 1961-62 (p. 72), I had the temerity to suggest approximate dates for each of the individuals named on the coins. This was reckless enough, but inexcusable was an error which I committed in that table by assigning dates ca. A.D. 855-880 to Shu'ayb b. abī-Ḥafṣ 'Umar, when we know that he struck dinars in 884-5, 888-9 and 894-5!<sup>6</sup> Now, after long deliberation and many frustrating attempts to fix approximate dates for each of the copper issues in the corpus on the basis of my tentative genealogical table, I have come to the conclusion that it would, in the present state of our knowledge, be wiser not to try to assign precise or even approximate dates to many of the issues but rather to present a simple, purely numismatic, classification of the coins, together with a brief commentary on their characteristics and such chronological indications as are self-evident. Some of the issues can of course be exactly or approximately dated. These are:

Class A, *fulūs* of 'Umar b. 'Isâ: between 232 H./A.D. 847 and 247 H./A.D. 861. The terminal date is provided by the name of the Caliph.

Classes B and C, dinars of Shu'ayb: 271 H./A.D. 884-5.

Class D, dinar of Shu'ayb: 275 H./A.D. 888-9.

Class E, dinars of Shu'ayb: 281 H./A.D. 894-5.

<sup>6</sup> My attention was first drawn to this unhappy contradiction in dates by Mrs. Alice-Mary Talbot. The error doubtless had its origin in my attempt to provide enough years in the latter part of the chronology to account for all the names preserved on the coins in dynastic succession.

Classes F, G, H, I and J, *fulūs* of Shu'ayb: between ca. 250 H./A.D. 864 and ca. 281 H./A.D. 895.

Class K, *fulūs* of Shu'ayb and 'Umar: between ca. 250 H./A.D. 864 and ca. 281 H./A.D. 895. One is tempted to separate these chronologically from Classes F–J and to give them a later date on the grounds that only after a certain interval did Shu'ayb put the name of his heir on the obverse; but this is speculative.

Class R, dirhem of Aḥmad b. 'Umar: 326 H./A.D. 937–8.

Class S, dinar of 'Ali b. Aḥmad: 337 (?) H./A.D. 948–9.

Class T, dinar of 'Ali b. Aḥmad: 340 (?) H./A.D. 951–2.

Class U, dinar of 'Abd al-'Azīz b. Shu'ayb: 343 H./A.D. 954–5.

Class V, dirhem of 'Abd al-'Azīz b. Shu'ayb: 350 H./A.D. 961.

As for Classes L, M, N, O and P, *fulūs* of Muḥammad b. Shu'ayb, Yūsuf (b.?) 'Umar, Shu'ayb (b.?) Aḥmad, 'Ali b. Aḥmad (and 'Ali [b.?] Aḥmad), although they may have followed in roughly the chronological order suggested by my proposed genealogical table, I would now for the time being group them all between approximately 281 H./A.D. 895 and about 330 H./A.D. 941–2, a date which might fall within the reign of 'Ali b. Aḥmad of the dinars of 337 (?) and 340 (?) H. All these coppers have in common with most of Shu'ayb's and Shu'ayb/'Umar's coins (Classes F–K) the curious distribution of the words of the declaration of faith in the obverse area, with the word *lā'* at the end of the second line, and a quite similar fabric. They cannot be too far removed in date from Classes F–K. Finally, the *fulūs* of Class Q, 'Ali b. Yūsuf, are quite distinctive in appearance, with somewhat more careful epigraphy and with the full name (son and father) on one side of the coin; I would place them toward the end of the dynasty, i.e., somewhere between ca. 330 H./A.D. 941–2 and the accession of 'Abd al-'Azīz (no later than 343 H./A.D. 954–5). 'Abd al-'Azīz was said to have been an old man when he was captured, but perhaps he did not succeed to the rule until he was already advanced in age.

I would hesitate to assign even an approximate date to the two very problematical coins in Class W. They appear to be *sui generis*. They might, along with the single coin in Class X, more properly be classified among the unidentifiable coins of Class Y, but I have given them a separate entry because of the great interest they would have if the mint name of Iqrīṭish is indeed present.

One final general observation may be made about the names on the coins. One might hope that the choice of obverse or reverse for the position of the names might give some clue as to who was the ruler and who the heir designate or deputy, or who the father and who the son (where *ibn* is, or seems to be, lacking). But I fear that this is not the case: no clear pattern emerges. One can only say that the reverse appears to be the preferred position for the principal name. Here is a summary of the evidence:

<i>Class</i>	<i>Obverse</i>	<i>Reverse</i>
A	Full name of ruler	Name of Caliph
B-E	"Immobilized"? name	Name of Caliph and ruler
F-J	No name	Name of ruler
K	Name	Name
L	X, son of	Y
M	Name	Name
N	Name	Name
O	Y	X, son of
P	(son of?) Y	X
Q	No name	X, son of Y
R	Y	X, (son of?)
S	Y	Name of Caliph and X, son of
T	(Y?)	(Name of Caliph and X, son of?)
U	son of Y	Name of Caliph and X
V	son of Y	Name of Caliph and X

## COLLECTIONS

The coins included in the corpus are to be found in the following collections, arranged alphabetically according to the cities or places in which the collections are (or were, as of the latest information available) located:

Alexandria, Egypt, Greek Gymnasium.  
Allentown, Pennsylvania, collection of Jesse A. Yockers.  
Arkadi Monastery, Rethymnon nome, Crete.  
Athens, Greece, Agora Excavations.  
Athens, Greece, National Museum.  
Athens, Greece, antique dealer.  
Berlin, Germany, Staatliche Museen.  
Cairo, Egypt, National Library.  
Copenhagen, Denmark, Royal Coin Cabinet.  
Corinth, Greece, American Excavations.  
Herakleion, Crete, Archaeological Museum.  
Herakleion, Crete, Historical Museum.  
Herakleion, Crete, collection of Nikolaos Metaxas.  
Herakleion, Crete, private collection.  
Istanbul, Turkey, Archaeological Museum.  
Istanbul, Turkey, Yapı ve Kredi Bankası.  
Istanbul, Turkey, private collection.  
Khamalevri, Rethymnon nome, Crete, village school.  
Khanya, Crete, Archaeological Museum.  
Leningrad, U.S.S.R., Hermitage Museum.  
London, England, British Museum.  
London, Collection of Richard Falkiner.  
Madrid, Spain, Museo Arqueológico Nacional.  
Madrid, Spain, Vives collection.  
Milan, Italy, Museo Stefano de Mainoni.

New York, N.Y., American Numismatic Society.  
 Oxford, England, Ashmolean Museum.  
 Padova, Italy, Museo Cufico Naniano.  
 Paris, France, Cabinet des Médailles.  
 Rethymnon, Crete, Museum.  
 Rome, Italy, collection of Dr. Paul Balog.  
 Stockholm, Sweden, Royal Coin Cabinet.  
 Viannos, Herakleion nome, Crete, Gymnasium.  
 Washington, D.C., collection of David G. Briggs.  
 Yannoudi, Rethymnon nome, Crete, collection of Gen.  
     Youloundas.  
 Location unknown (Soret collection).  
 Location unknown (Fraehn manuscript reference).

It should be noted that I have examined at first hand or by means of photographs all the specimens except those in Berlin, the National Library in Cairo, the private and bank collections in Istanbul, Leningrad, the Vives collection in Madrid, Milan, Padua and, obviously, "location unknown." The occasions when I examined the coins at various localities in Crete and in several European museums are noted in the corpus.<sup>7</sup> Those from the Agora Excavations I have handled several times. The specimens from the Corinth

<sup>7</sup> I trust the more serious-minded readers of this monograph will condone a few unscholarly notes recounting the circumstances in which I found and recorded some of the specimens. If such readers should find these anecdotes frivolous they can ignore them. Others, I hope, may derive some vicarious pleasure from sharing with me the recollection of incidents which have brightened my path in the long pursuit of the coinage of the obscure and elusive dynasty of the Amirs of Crete. May I take this opportunity to acknowledge with much appreciation my debt to the American Philosophical Society, the American Council of Learned Societies, the John Simon Guggenheim Memorial Foundation, the Institute for Advanced Study at Princeton, the American School of Classical Studies at Athens, and the American Numismatic Society, all of which institutions or organizations have helped me from time to time since 1956 with grants and fellowships or with other facilities in my study of Arab-Byzantine relations in the Aegean area.

Excavations I found and photographed after a long search through all the excavation coins there during several visits in 1958 and 1960.

Every effort has been made to trace and record the original provenances of the specimens in the corpus, but in many cases the information has not been recoverable. As might be expected, Crete is the provenance of the largest number of coins: 196 specimens in all. The next largest number (aside from the 43 of unknown provenance) is from mainland Greece, 15 in all, of which 11 specimens are from the scientifically controlled excavations in the Athenian Agora and Corinth. In my paper read at the International Numismatic Congress in Rome in 1961 I offered a few suggestions with regard to the significance of the distribution of coins of the Amirs found on Greek soil, and the relevant paragraphs are perhaps worth repeating here.<sup>8</sup>

The finds both on the mainland and on the island itself are of very real interest. The large number of specimens found in Crete—large, that is, in proportion to the total of this class known—constitutes eloquent confirmation of John Walker's attribution of these coins to the Amirs of Crete . . . . As for the specimens found in the excavations of the Athenian Agora and the others of Athenian provenance, there are several possible explanations. I am tempted to connect their presence with the remarkable Arab mosque inscription, fragments of which were found in and near the Agora. I cannot at this time go into the many problems raised by this inscription and must refer those interested to my article on the subject in *Hesperia*.<sup>9</sup> The exact, or even approximate, date of this inscription is uncertain; it may be 10th century, it may be 11th. As for the Cretan coins of Athenian provenance, several of them are certainly 9th century and two of them are probably 10th. At all events, we have here additional

<sup>8</sup> Miles, "Circulation of Islamic Coinage," pp. 494-495.

<sup>9</sup> George C. Miles, *Hesperia* 1956, pp. 329-344.

evidence of the probable presence of Arabs in Athens in the 9th or 10th century, in what capacity we are not certain, whether piratical, warlike, captive, trading or transient. I say "probable" presence, because we cannot of course exclude the possibility that the coins were brought back from Crete by Greek merchants or liberated prisoners from one of the frequent Arab raids on Greek soil. It has incidentally been a great disappointment to me that I have been unable to find any Arab coins on the island of Aegina (not far removed from Athens), where we know that Arabs—almost certainly from Crete—descended frequently early in the 9th century and were in occupation for several years toward the very end of that century.<sup>10</sup>

The evidence of some connection between the Cretan Arabs and Corinth is even more impressive than that for Athens and raises equally if not more intriguing questions. Some of the coins are almost certainly of the 9th century; and as for 'Ali b. Yūsuf and 'Ali b. Aḥmad, I am not yet prepared to assign them dates, but they probably lived in the 10th century (before 961).<sup>11</sup> What this connection may have been is by no means certain. We have written documentation for Arab raiding incursions in the Corinth area about 879;<sup>12</sup> and even as early as 805 or 807, before the definitive Arab occupation of Crete, Byzantine troops stationed in Corinth may have been involved—although perhaps not as actively as St. Andrew—in the defense of Patras against Slavs who had called upon the Arabs to assist them in their attack.<sup>13</sup> While a temporary Arab occupation of

<sup>10</sup> See, for example, the authorities quoted by Kenneth M. Setton, in *AJA*, 58 (1954), p. 314.

<sup>11</sup> Now see above, p. 7.

<sup>12</sup> References in Setton, *AJA*, 58 (1954), p. 312; see also J. H. Finley Jr., "Corinth in the Middle Ages," *Speculum*, VII (1932), p. 481.

<sup>13</sup> Finley, *Speculum*, VII (1932), p. 480; Setton, *AJA*, 58 (1954), p. 311. For the account of St. Andrew's intervention in the siege of Patras, see K. M. Setton, "The Bulgars in the Balkans and the Occupation of Corinth in the Seventh Century," *Speculum*, XXV (1950), p. 514.

Corinth is by no means a possibility to be excluded, we should recall that it was in the reign of Theophilus (829–842) that the Byzantine numismatic evidence in the excavations begins again to be more plentiful, and I am prepared to believe that the coins of the Amirs at Corinth are more probably tokens of a trade relationship between the Byzantine city and Arab Crete than traces of warlike activity on the site. As I have pointed out on other occasions,<sup>14</sup> I am of the opinion that we must revise the traditional point of view with respect to the Arabs of Crete, that they were exclusively barbarian pirates, and that we should recognize the possibility that even in the midst of their piratical raids on the islands and the mainland they may have been at least intermediaries in the exchange of commodities and culture. At all events, the presence of these coins at various spots in Corinth is, I think, an interesting bit of fresh and authentic documentation in the obscure mediaeval history of the city; in other words, primary source material which should not be neglected and which is unlikely to be supplemented or corroborated by contemporary written authority.

<sup>14</sup> E.g., in *Κρητικά Χρονικά*, 1956, p. 367.



## PROVENANCES

<i>Locality</i> <sup>15</sup>	<i>A</i>	<i>R</i>	<i>CU</i>	<i>Total</i>
Crete				197
Afrati (Herakleion nome) Ἀφρατί			1	
Ag. Ioannis (Herakleion nome) Ἅγιος Ἰωάννης			2	
Ambelouzos (Herakleion nome) Ἀμπελούζος			1	
Arkadi Monastery, SW of (Rethymnon nome) Ἀρκάδι			1	
Arkhanai (Herakleion nome) Ἀρχάναι			3	
Avdou (Herakleion nome) Ἀβδοῦ			1	
Bendevi Kamara (Herakleion nome) Μπενδεβί Καμάρα			1	
Dafnes (Herakleion nome) Δαφνές			1	
Eleutherna (Rethymnon nome) Ἐλεύθερνα			1	
Ellenika Knosou (Herakleion nome) Ἑλληνικά Κνωσοῦ			1	
Garypa Pediados (Herakleion nome) Γαρύπα Πεδιάδος			1	
Gergeri (Herakleion nome) Γέργερη			1	
Gortyna or Gortys (Herakleion nome) Γόρτυνα			2	
Herakleion Ἡράκλειον			60	
Herakleion district (the city or environs)			14	
Herakleion airport			1	
Herakleion nome, presumably			2	

<sup>15</sup> The transliteration of Greek place names always presents a problem. A number of inconsistencies will be found in the system, or lack of system, which I have adopted, but the general objective has been to present a reasonably acceptable compromise between the Greek spelling and present-day pronunciation.

<i>Locality</i>	<i>A'</i>	<i>R</i>	<i>CU</i>	<i>Total</i>
Inion (Herakleion nome) Ἰνιον			I	
Kalo Khorio Pediados (Herakleion nome) Καλὸ Χωριὸ Πεδιάδος			I	
Kastelli Pediados (Herakleion nome) Καστέλλι Πεδιάδος			I	
Khamalevri (Rethymnon nome) Χαμαλεῦρι			I	
Khanya nome, presumably Χανιά			3	
Khersonesos (Herakleion nome) Χερσόνησος			I	
Khoustoulia (Herakleion nome) Χουστουλιανὰ			I	
Knosos (Herakleion nome) Κνωσός			4	
Knosos, river by (Herakleion nome)			2	
Kounavoi Pediados (Herakleion nome) Κουνάβοι Πεδιάδος			3	
Mastampas or Mastaba (Herakleion nome) Μασταμπάς			I	
Melidokhori (Herakleion nome) Μελιδοχώρι			3	
Mesa Katsabas (Herakleion nome) Μέσα Κατσαμπάς			I	
Mesara plain (Herakleion nome) Μεσαρά			I	
Meseleroi (Lasithi nome) Μεσελέροι			I	
Metropolis (Herakleion nome) Μητρόπολης			4	
Pakio (Rethymnon nome) Πακίό			I	
Phaistos or Ag. Triada (Herakleion nome) Φαιστός-Ἀγία Τριάδα			6	
Phoinikia (Herakleion nome) Φοινικιά			3	
Plora (Herakleion nome) Πλώρα			I	
Rethymnon nome, presumably Ρέθυμνον			7	
Rotasi (Herakleion nome) Ροτάσι			I	
Tylisos (Herakleion nome) Τύλισος			I	
Vyzari (Rethymnon nome) Βυζάρι			2	
Xyda Pediados (Herakleion nome) Ξιδᾶ			2	

<i>Locality</i>	<i>A</i>	<i>R</i>	<i>CU</i>	<i>Total</i>
Yannoudi (Rethymnon nome) Γιαννοῦδι			1	
Crete, precise locality unknown			43	
Crete, almost certainly	1		5	
Probably Crete or Greek mainland			1	1
Greek Mainland				15
Athenian Agora			3	
Corinth Excavations			8	
Macedonia (?)	1			
Greece, precise locality unknown			3	
Probably Anatolian Turkey			1	1
Probably Egypt	1		2	3
Egypt or Greek mainland			1	1
Egypt or Syria	2			2
Syria or Palestine			1	1
Sweden, probably Gotland		1		1
Probably Spain			3	3
Unknown	5	1	37	43
TOTAL	10	2	256	268



## METROLOGY

Little can be said about the metrology of the coinage. The recorded weights of Shu'ayb's dinars and of the dinar of 'Abd al-'Azīz b. Shu'ayb approach the classical Arab standard: 4.00, 4.14 (2), 4.20 and 4.25 grams. The one recorded weight of 'Ali b. Aḥmad is light (3.85 grams). The two dirhems are pierced and badly clipped; their weights have no significance. The weights of relatively few of the copper *fulūs* are recorded. For Arab coppers, and especially in their worn and usually corroded condition, they are surprisingly consistent in weight. The coins of classes G, H and I are light (three weigh less than a gram and six others less than 2 grams), but the majority of the recorded weights of the other *fulūs* fall between 2.17 and 2.99 grams; only three weigh less than 2 grams, and five more than 3 grams, the heaviest being 3.53 grams.

## THE CORPUS

### BIBLIOGRAPHY

In addition to the articles dealing specifically or incidentally with the coins of the Amirs of Crete cited on pp. vii–viii, above, the following catalogues are referred to by abbreviated title in the corpus and commentary:

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# CLASS A

*Abū-Ḥafṣ ‘Umar b. ‘Isā*

*Fals*

*Obverse*

لا اله الا  
الله وحده  
لا شريك له  
[sic] عمر بن عسى

*Reverse*

محمد  
رسول الله  
المتوكل  
[sic] على الله

Beaded border.

Traces of beaded border.

1. Collection of Nikolaos Metaxas, Herakleion. Æ 17 mm.

(PLATE I, 1)

*Provenance:* Mesa Katsabas, Crete.

2. ANS. Æ 18 mm., 2.52 gr. (PLATE I, 2)

*Provenance:* Crete.

No. 2, the specimen in the American Numismatic Society and the less well preserved, was the first of these two coins to be discovered. It was bought from an antique dealer in Herakleion in 1965 by Mr. Jere L. Bacharach and was presented by him to the museum (accession no. 66.70). Only the *ra* of ‘Umar is entirely clear, and, as on no. 1, ‘Isā appears to be defectively spelled, lacking one tooth. The first two lines of the reverse are badly struck; al-Mutawakkil is quite clear, but the last line is very obscure. Despite the uncertainties in the reading of the name on the obverse I concluded that this, at the time unique, coin could be attributed to the conqueror of the island, abū-Ḥafṣ ‘Umar b. ‘Isā. Specimen no. 1, examined in May 1967, provided welcome confirmation of the readings of the names on obverse and reverse and assured the correctness of the attribution. The name on the reverse is that of the ‘Abbāsīd



Caliph al-Mutawakkil ‘alâ’llāh, who reigned from 232 to 247 H./A.D. 847–861. Therefore the issue must date not earlier than 232/847, about twenty years after the conquest, and not later than 247/861, some ten years after a date when, according to Ṭabari, abū-Ḥafṣ was still alive. Both A. Bykov and I<sup>16</sup> have argued against attributing any coins to the conqueror on the grounds that in his time the Arabs in Crete would have lacked the necessary technicians and equipment to issue coins, but it is now apparent that this argument is no longer valid. On the other hand these coins may have been struck for ‘Umar outside of Crete, perhaps in Egypt or in Spain.

Mesa Katsabas (Μέσα Κατσαμπάς), the provenance of no. 1, is a suburb of Herakleion situated just south of the coastal road which leads eastward from the city. The exact provenance of no. 2 cannot be determined but the coin was almost certainly found in Crete.

## CLASS B

*Shu‘ayb b. abī-Ḥafṣ ‘Umar*

*Dinar*, 271 H. (type a)

*Obverse*

لا اله الا  
الله وحده  
لا شريك له  
جعفر

*Reverse*

الله  
محمد  
رسول  
الله  
المعتمد على الله  
شعيب

*Inner margin:*

*Margin:* Qur’ān IX, 33.

[sic] بسم الله ضرب هذا الدينار سنة احد

Area enclosed by linear

[abbreviated?] وسبعين ومائتين

border; margin enclosed by

*Outer margin:* Qur’ān XXX, 3–4. linear border.

<sup>16</sup> Bykov, p. 66; Miles, “Genealogy,” p. 71.

1. British Museum, London. *N* 21 mm., 4.14 gr. (PLATE I, 3)

*Provenance*: almost certainly Crete.

This specimen was published by Walker, *NC* 1953, p. 126, no. 1 (also illustrated in Miles, "Genealogy," fig. 1). It came from the collection of Col. J. S. Cameron, bequeathed to the British Museum in 1947 (6.6.1947, 1585). As Walker observed, Col. Cameron's coins were collected by him almost exclusively in Crete (see G. K. Jenkins, "The Cameron Collection of Cretan Coins," *NC* 1949, p. 36). Both obverse and reverse dies are different from those of type b, below. Walker gave the weight as 4.13 gr., but Mr. Lowick of the British Museum has informed me that 4.14 gr. is the correct weight.

This dinar, dated 271 H./A.D. 884–5, bears three names: al-Mu'tamid 'alâ'llāh, Ja'far and Shu'ayb. There is no difficulty about identifying the first and third names, those of the 'Abbāsīd Caliph (256–279 H./A.D. 870–892) to whom Shu'ayb, the Amir of Crete, theoretically owed allegiance. The name of Ja'far poses a problem. Walker quite logically assumed<sup>17</sup> that this represents the name of the Caliph's son who, according to the chronicles, had been named heir apparent and received the honorific title of al-Mufawwid ilâ'llāh in 261 H./A.D. 875,<sup>18</sup> and whose name appears on many coins of al-Mu'tamid. Actually the name Ja'far occurs sporadically on both dinars and dirhems at a number of mints from as early as 256 H. down to 266 H.;<sup>19</sup> and the

<sup>17</sup> Walker, *NC* 1953, p. 127.

<sup>18</sup> Ṭabari, III, p. 1890.

<sup>19</sup> I have reviewed the principal relevant catalogues and the collection of the American Numismatic Society and I find that the name of Ja'far appears on either dinars or dirhems in 256–266 H. (with the exception of 262 and 265, but these are probably simply dates which have not been preserved) at the following mints: Armīniyah, Adharbayjān, al-Ahwāz, al-Baṣrah, Ḥulwān, al-Rāfiqah, Samarra, Fāris, al-Kūfah, Madīnat al-Salām, Miṣr, al-Mawṣil, Niṣibīn and Wāsiṭ. The latest date, 266, is represented by only one specimen of al-Ahwāz (C. J. Tornberg, *Numi Cufici* [Uppsala, 1848] no. 402 = Tiesenhausen, no. 2032); this might be an error in description, in which case the latest date would be 264.

honorific al-Mufawwiḍ appears on certain coins for the first time in 260 and continues (with one or two years not represented in the preserved corpus) down to 278 H.<sup>20</sup> In 279 H./A.D. 892 al-Mu'taḍid, destined to become the next Caliph in the same year, was designated heir apparent in place of Ja'far al-Mufawwiḍ.<sup>21</sup> For us, in our consideration of the significance of the name Ja'far on Shu'ayb's dinar of 271 (and those of 275 and 281), the important fact is that at other mints in the 'Abbāsīd realm Ja'far's name ceases to appear on the coins in 266 (or perhaps 264). One wonders whether Walker's assumption that the name Ja'far on Shu'ayb's dinars represents the Caliph's son is correct. Crete's isolation from the rest of the 'Abbāsīd empire might explain the anomaly of the retention of the name of the deceased Caliph on the issue of 281 (see below, Class E), but the gap of five (or perhaps seven) years between the last occurrence of the name Ja'far elsewhere and its appearance in Crete seems entirely too great for us to accept the identification without question. Might not the name here rather be that of Shu'ayb's own heir designate? And might not Ja'far be the given name of either Babdel (abū-'Abdullāh) or of Zerkunis of the Byzantine chronicles? But if Ja'far is the name of a Cretan Arab why does it not appear on any of the copper coins? The problem remains unsolved.

At all events the date 271, along with the dates 275 and 281, give us a few firm chronological data for the period of Shu'ayb's rule. Unfortunately these dates do not tally too well with the indications in the Byzantine chronicles, according to which Saipis ruled during the reign of Michael III, 842–867, and was perhaps still alive in 875; while "Babdel" was a contemporary of Leo VI the Wise, 886–912.

<sup>20</sup> At the mints of Armīniyah, Badghīs, al-Baṣrah, al-Rāfiqah, Samarra, Fāris, Miṣr, al-Mawṣil, Niṣibin, and mint unnamed.

<sup>21</sup> Ṭabari, III, p. 2131. Walker, NC 1953, p. 127 (probably following *EI*<sup>1</sup>, s.v. al-Mu'tamid) gives the date, mistakenly, as 278.

Combining the numismatic and the written indications we must assume that Shu'ayb's rule lasted for about 50 years, a very long reign for a prince who, we gather, "lived dangerously."

CLASS C

*Shu'ayb b. abī-Ḥafṣ 'Umar*

*Dinar*, 271 H. (type b)

*Obverse*: as type a, but  
inner margin:

بسم الله ضرب هذا الدين سنة احدى  
وسبعين ومثلن [sic]

*Reverse*:

محمد  
رسول الله  
المعتمد على الله  
شعيب

Outer margin enclosed by  
linear border.

Margin and borders as on  
type a.

1. Ashmolean Museum, Oxford. *N* 21 mm., 4.20 gr. (PLATE I, 4)

*Provenance*: unknown.

This specimen was purchased in 1964 from Spink and Son, Ltd. in London, who acquired it from Mr. Philip Thorburn, who in turn had purchased it from the firm of B. A. Seaby, Ltd. Despite the friendly cooperation of Miss Helen Mitchell at the Ashmolean and of Mr. Albert Baldwin and the Messrs Seaby, I have not been able to trace the pedigree of the coin farther back.

Class C is simply a variety of Class B with a slight difference in the writing of the date formula and a different arrangement of *Muḥammad rasūl Allāh* on the reverse.

CLASS D

*Shu'ayb b. abī-Ḥafṣ 'Umar*

*Dinar*, 275 H.

Details lacking except no mint name, جعفر beneath obverse area, and المعتمد على الله beneath reverse area.

شعيب

1. National Library, Cairo. *AV* 4.00 gr.

*Provenance*: Egypt or Syria?

This dinar, originally in the collection of E. T. Rogers, was first listed in his "Catalogue of the Collection of Moham-madan coins Belonging to E. T. Rogers Bey" in *NC* 1883, p. 230, no. 139. Rogers' collection was purchased by the Egyptian Government from the executors of his estate in November 1884, and thereupon was housed in the Khedivial Library, now the National Library, in Cairo. Stanley Lane-Poole listed the specimen under the 'Abbāsid Caliphs in *Khedivial Library*, p. 84, no. 618 B (cf. Walker, *NC* 1953, p. 127, no. 2). The coin was doubtless acquired by Rogers either in Syria or Egypt, in both of which countries he served.<sup>22</sup>

This unique dinar of 275 H., never illustrated or fully described, evidently is of the same general type as Class B and C. See the commentary on Class B for relevant observations. I have made several efforts to see the coin. In 1954 I was given permission to examine the coins in the National Library, but it was never possible to assemble at one time the three functionaries with different keys required to open the cabinets.

#### CLASS E

*Shu'ayb b. abī-Hafṣ 'Umar*

*Dinar*, 281 H.

##### *Obverse*

لا اله الا  
الله وحده  
لا شريك له  
جعفر

##### *Reverse*

الله  
محمد  
رسول  
الله  
المعتمد على الله  
شعيب

<sup>22</sup> Cf. *Khedivial Library*, p. vii.

*Inner margin:**Margin:* Qur'ān IX, 33.

بسم الله ضرب هذا الدين سنة  
 احدى [احدا or] وثمانين ومائتين  
 احدا - ومائتان (Berlin)  
 احدى - ومائتين (Balog)

*Outer margin:* Qur'ān XXX, 3-4.

Area enclosed by linear border; margin enclosed by linear border. Borders as obverse.

1. Münzkabinett, Staatliche Museen, Berlin. *A*, 23 mm., 4.25 gr. (PLATE I, 5)

*Provenance:* unknown.

Published by Nützel, I, no. 1577 (cf. Walker, *NC* 1953, p. 127, no. 3). The weight was incorrectly given as 4.16 gr. in Nützel's catalogue. I am informed by Mme Jarmila Štěpková that the Berlin accession record, dated 8 May, 1883, bears the notation "gekauft vom Herrn Asad Kenan Bey."

2. National Library, Cairo. *A* 3.90 gr. (pierced).

*Provenance:* Egypt or Syria?

Like the dinar of 275 H. (no. 1 of Class D, above) this dinar was originally in the collection of E. T. Rogers (*NC* 1883, p. 231, no. 140; *Khedivial Library*, p. 84, no. 618C; cf. Walker, *NC* 1953, p. 127, no. 4). In Rogers' publication no details are given other than the fact that the coin bears the name of al-Mu'tamid; almost certainly his notation "Like 138" is an error for "Like 139," the dinar of 275 H. immediately preceding (no. 138 is a dinar of al-Rāfiqah with the names of al-Mufawwiḍ and Aḥmad b. al-Muwaffaq). Lane-Poole wrote, "Like preceding: date posthumous" (the preceding being no. 618B, the dinar of 275 H.), and transcribed the date: سنة احدى وثمانين ومائتين.

3. Collection of Dr. Paul Balog, Rome. *A* 22 mm., 4.14 gr. (PLATE I, 6)

*Provenance:* Egypt.

Acquired by Dr. Balog in Egypt before 1954. Illustrated in Miles, *D.O. Papers*, 18, fig. 3 (enlarged). The dies of both obverse and reverse differ slightly from those of the Berlin specimen. Dr. Balog has informed me that no specific information is recoverable with respect to provenance, but that he believes that the coin was found in the vicinity of Cairo or in Upper Egypt.

These three dinars dated 281 H./A.D. 894-5, struck from at least two sets of dies, are especially remarkable because of the retention of the name of the Caliph al-Mu'tamid, who had died on 20 Rajab 279 H./A.D. 16 October 892. Nützel did not remark on the anomaly, but Lane-Poole, and of course Walker, did. The latter suggested, as noted above in the commentary on Class B, that the explanation was to be found in the isolation of Crete, implying that word of the death of al-Mu'tamid and of the accession of al-Mu'taḍid had not reached the island. Seventeen months seems rather too long a time for the news to travel to Crete, and it would appear to me that the die engraver was simply copying the style and legends (except for the date) of the issue of 271. The allegiance to the 'Abbāsid Caliph was after all purely nominal. There is no question of a misreading of the Caliph's name: it is quite clearly al-Mu'tamid on both Dr. Balog's and the Berlin specimens. The problem about the occurrence of the name Ja'far, if it signifies al-Mu'tamid's son, two years after he had ceased to be heir apparent and some 15 years after it last appears on dinars in other parts of the Caliphate, is essentially the same as that discussed in the commentary on Class B.

(Guy Le Strange in *JRAS* 1880, p. 544, mentions a dinar of the year 296 which he assigns to the Aghlabids on the basis of the fact that it bears no mint name and has the characteristic tail of the *yā'* of *bi'l-hudā*. The coin, acquired in Persia, is not completely described, but it appears to

have Qur'ān IX, 33 in the obverse margin, *Ja'far* beneath the reverse area, and the date formula in the reverse margin. Known Aghlabid dinars of the year 296 have the name of the Aghlabid. Is it possible that this is a coin of an Amir of Crete?).

CLASS F

*Shu'ayb b. abī-Hafṣ 'Umar*

*Fals*

*Obverse*

لا اله الا  
الله وحده لا  
شريك له

*Reverse*

محمد  
رسول  
الله  
شعيب

The borders appear to vary. In many cases one cannot tell because of wear, off-flan striking and other obscurities whether there are two or three borders and which are beaded or dotted and which linear. Most commonly there are three borders on the obverse (single linear enclosed by two dotted), and the same, or double dotted, on the reverse.

1. Yockers Collection, Allentown, Pennsylvania. Æ 19 mm., 2.44 gr.

*Provenance*: unknown.

This specimen, along with other *fulūs* of the Amirs (Classes G, H and I), was acquired by Mr. Yockers from a coin dealer in New York in the late 1950's.

2. Greek Gymnasium, Alexandria, Egypt. Æ 20 mm.

*Provenance*: Egypt or mainland Greece.

I examined and made a pencil rubbing of this specimen in Alexandria in 1954. While one might assume that it was of Egyptian provenance I have been informed by Mr. Lucas Benachi that the coin possibly had come to the Gymnasium from the Glymenopoulos collection of antiquities, most of which were of Boeotian or other mainland Greek provenance.



3. Numismatic Museum, Athens. Æ 20 mm. (pierced).

*Provenance:* Melidokhori, Crete.

This specimen, along with another of Class F and one of Class K, was found in or near the village of Melidokhori (Μελιδοχώρι), located at the foot of the acropolis of Kastirioti (Καστιριώτη), due south of Roukani and Kanli Kastelli, in the nome of Herakleion. In January 1966 the three coins were given by villagers who had found them to Mr. Mano Khari and Mr. Miltis Paraskevaidis, the well-known Athenian archaeological reporter. They in turn, as requested by the finders, turned the coins over to the Numismatic Museum in Athens. I am indebted to Mr. Paraskevaidis for information about the provenance (see also his article in *Καθημερινή*, 13 Feb., 1966), and to Mrs. Mando Caramessini Oeconomides for plaster casts of the coins.

4. Numismatic Museum, Athens. Æ 21 mm.

*Provenance:* Melidokhori, Crete.

See no. 3, above, for the provenance.

5. Agora Excavations, Athens. Æ 20 mm.

*Provenance:* Athenian Agora.

This specimen has been published in Miles, *Athenian Agora*, p. 20, no. 1; inventory number 2717.1. One of three coins of the Amirs found in the Agora excavations, it has no archaeological context, being a casual surface find in an undetermined area of the excavations.

6. Antique dealer in Odos Pandrosou, Athens. Æ approx. 20 mm.

*Provenance:* Probably Greek mainland or Crete.

Seen by the writer in November 1958 among a miscellaneous lot of unsorted minor coins. The dealer would not part with it at a reasonable price. It was in very poor condition.

7. Royal Coin Cabinet, Copenhagen. Æ 20 mm., 2.52 gr.  
(PLATE I, 7)

*Provenance:* probably Anatolian Turkey.

This is no. 685 of Østrup's catalogue, where it is listed among Umayyad coppers without name of mint, and where no mention is made of the partially preserved name of Shu'ayb. I was able to identify the coin on a visit to the cabinet in Copenhagen in September 1955. Dr. Otto Mørkholm has informed me that the coin was acquired in 1846 from a missionary by the name of Hass, resident in Smyrna.

8. Corinth Excavations. Æ.

*Provenance:* Corinth, Agora, S.C.

Registered April 30, 1936, no. 1. A very badly worn specimen.

9. Corinth Excavations. Æ 20 mm. (PLATE I, 8)

*Provenance:* Corinth, Agora, S.E.

Registered May 3, 1935, no. 9.

10. Corinth Excavations. Æ 21 mm.

*Provenance:* Corinth, market north of temple.

This specimen, badly worn, was registered on June 21, 1929. A card in the field inventory of coins numbered 2140 records the coin as "Old Turkish."

11. Corinth Excavations. Æ.

*Provenance:* Corinth, Church of St. John Theologos.

A very worn and obscure specimen, but almost certainly of this type, registered April 13, 1935, no. 17.

- 12-15. Archaeological Museum, Herakleion. Æ.

*Provenance:* Herakleion.

These four specimens, all badly worn and corroded, were found in 1955 several meters beneath the surface during the course of excavations for the foundations of the Astir

Hotel just off Ὁδὸς 25 Αὐγούστου. They were published in Miles, *Κρητικά Χρονικά* 1955, pp. 149–151, where they are numbered 1 (almost completely effaced and not illustrated), 3, 4 and 6. The illustrations in that article are enlarged somewhat more than two diameters. According to N. Platon, at that time Director of the Archaeological Museum in Herakleion and Ephor of Antiquities in Crete, the stratum in which the coins were unearthed underlay some Venetian constructions and overlay a probably Roman level. Some post-961 Byzantine coins were found at the same level as the Arab coins.

16–17. Archaeological Museum, Herakleion. Æ.

*Provenance:* Herakleion.

Two specimens, examined on May 25, 1967. These and other specimens similarly patinated and all badly corroded, are accompanied by a label reading “Ἐκ τράπεζα.” Mr. Stylianos Alexiou and Mr. Manolis Borboudakis are of the opinion that the note signifies that these coins were found in excavating for the foundations of the Bank (Ethniki Trapeza) and Astir Hotel in Herakleion in 1955, but that they were not turned over to the Museum at the same time as nos. 12–15, above, and thus were not brought to my attention when I prepared the brief article for *Κρητικά Χρονικά* later that year. One of the curators in the Museum suggested that “Trapeza” might signify the locality by that name in the Lasithi Valley, but there seems to be no evidence to support this attribution.

18. Archaeological Museum, Herakleion. Æ.

*Provenance:* Herakleion.

A very obscure specimen found near the church of Ag. Petros (S. Pietro) near the waterfront. I examined the coin during a brief visit to Herakleion in December 1958. It was found sometime after April 1956, when I recorded all the coins of the Amirs at that time in the Museum.

19–20. Archaeological Museum, Herakleion. Æ.

*Provenance:* Herakleion.

An obscure and largely effaced specimen found east of the harbor sometime between April 1956 and December 1958 (see no. 18).

21. Archaeological Museum, Herakleion. Æ 21 mm.

*Provenance:* Phoinikia, Crete.

A worn specimen found in or near the village of Phoinikia (Φοινικιά), about six kilometers southwest of Herakleion, and purchased by the Museum in 1965 (identified from a plaster cast kindly furnished by Mr. Stylianos Alexiou).

22. Archaeological Museum, Herakleion. Æ 21 mm. (PLATE I, 9)

*Provenance:* Vyzari, Byzantine basilica.

This specimen was unearthed during the course of excavations in 1958 conducted by K. Kalokyris near Vyzari, located on the western slopes of Mt. Ida in the region of Amari. I examined and photographed the coin at the Archaeological Museum in December 1958. Mention of it, and of another coin of the Amirs (Class O, no. 3, below), is made in Τὸ Ἔργον τῆς Ἀρχαιολογικῆς Ἑταιρείας for 1958 (Athens, 1959), p. 180, and in Κρητικά Χρονικά 13 (1959), pp. 31–32 (cf. article in Τὸ Βῆμα, Nov. 20, 1958). The basilica probably dates from the early 9th century and presumably was destroyed at the time of the Arab invasion.

23. Archaeological Museum, Herakleion. Æ 20 mm.

*Provenance:* Crete.

A specimen brought to the Museum in December 1956 by a peasant woman. A plaster cast was transmitted to me by Mr. Stylianos Alexiou (January 1957). The exact provenance was not recorded.

24. Archaeological Museum, Herakleion. Æ 21 mm. (PLATE I, 10)

*Provenance:* Crete.

This specimen, as well as nos. 25–28, below, was found in April 1956 among unsorted and unidentified coins of all periods in the Museum.<sup>23</sup> Published in *Κρητικά Χρονικά* 1956, p. 367, no. 1. Exact provenance unrecorded.

25. Archaeological Museum, Herakleion. Æ 21 mm. (PLATE I, 11)

*Provenance:* Crete.

See no. 24. *Κρητικά Χρονικά* 1956, p. 367, no. 2.

26. Archaeological Museum, Herakleion. Æ 20 mm.

*Provenance:* Crete.

A very badly worn and obscure specimen. See no. 24. *Κρητικά Χρονικά* 1956, p. 367, no. 3.

27. Archaeological Museum, Herakleion. Æ 20 mm. (PLATE I, 12)

*Provenance:* Crete.

See no. 24. *Κρητικά Χρονικά* 1956, p. 368, no. 4.

28. Archaeological Museum, Herakleion. Æ 18 mm.

*Provenance:* Crete.

See no. 24. *Κρητικά Χρονικά* 1956, p. 368, no. 5.

29. Archaeological Museum, Herakleion. Æ 20 mm.

*Provenance:* Arkhanai, Crete.

This well preserved specimen, oxidized when found and subsequently cleaned at the Museum in Herakleion, was found in 1964 on the surface of the palace site at Arkhanai

<sup>23</sup> I am indebted to Mr. Nicholas Platon, at that time Director of the Archaeological Museum, and to Mr. Stylianos Alexiou, the present Director, for permitting me to search through the thousands of miscellaneous Roman, Byzantine, mediaeval and Turkish coins which had come into the Museum over the years. My primary objective in visiting Crete in 1956 had been that of finding lapidary epigraphical remains of the Arab period (cf. Miles, "Epigraphical Survey," p. 343), but I had hoped that I might also find some of the coins. It was not until later that it became apparent that the only epigraphical testimonia I was destined to collect were numismatic.

(Ἀρχάναι), south of Knosos, now being excavated by Ioannis Sakellarakis, Assistant Curator at the Herakleion Museum. Preliminary reports on the remarkable excavations at and near Arkhanai have appeared in *The Illustrated London News*, March 26, 1966, pp. 32–33; *Archaeology*, Vol. 20, No. 4 (Oct. 1967), pp. 276–281; and *Ἀρχαιολογικὸν Δελτίον*, Vol. 20 (1965), pp. 557–558; Vol. 21 (1966), pp. 411–414. I am grateful to Mr. Sakellarakis for bringing the specimen to my attention and for permitting me to photograph it on April 18, 1966.

30. Archaeological Museum, Herakleion. Æ 20 mm.

*Provenance*: Phoinikia, Crete.

A specimen brought to the Museum sometime between 1961 and 1966 and examined on April 18, 1966.

31. Archaeological Museum, Herakleion. Æ 20 mm.

*Provenance*: Phaistos or Ag. Triada, Crete.

A specimen in a lot of miscellaneous surface finds of all periods from Phaistos or Ag. Triada, examined at the Museum on April 18, 1966.

32–34. Archaeological Museum, Herakleion. Æ.

*Provenance*: Phaistos or Ag. Triada, Crete.

Three specimens examined on May 25, 1967.

35. Archaeological Museum, Herakleion. Æ 20 mm.

*Provenance*: Inion (Ini), Crete.

This specimen was brought to the Museum in November, 1956, but it did not come to my attention during my visits in 1958 and 1961. I examined it on April 18, 1966. The village of Inion (Ἰνίων) is located about eight kilometers south of Arkalokhori in Herakleion nome.

36–39. Archaeological Museum, Herakleion. Æ.

*Provenance*: Crete.

Four specimens examined on May 25, 1967. Exact provenance unrecorded.

40-41. Archaeological Museum, Herakleion. Æ.

*Provenance:* Metropolis, Crete.

Two specimens found on the football field at Metropolis (Μητρόπολις) Mesara plain, and brought to the Museum in 1967; examined February 18, 1970.

42. Archaeological Museum, Herakleion. Æ.

*Provenance:* Dafnes, Crete.

A specimen brought to the Museum sometime between June 1967 and February 1970; examined February 18, 1970. Dafnes (Δαφνές) lies about 14 kilometers southwest of Herakleion on the main road to the Mesara plain.

43. Historical Museum, Herakleion. Æ 19 mm. (PLATE II, 1)

*Provenance:* Ag. Ioannis, Crete.

This specimen, Museum inventory number 1649, was examined in September 1961. Ag. Ioannis (Ἅγιος Ἰωάννης) is located about midway between Herakleion and Knosos.

44. Historical Museum, Herakleion. Æ 20 mm.

*Provenance:* Kastelli Pediados, Crete.

A badly worn specimen, probably of this type but possibly of the type with 'Umar beneath the obverse (Class K), Museum inventory number 1833. I examined the coin in September 1961. Kastelli Pediados (Καστέλλι Πεδιάδος) is located in the eastern part of Herakleion nome, west of the Lasithi Valley and just west of the site of ancient Lyttos, about 13 km. due south of Khersonesos.

45. Historical Museum, Herakleion. Æ 19 mm.

*Provenance:* Mastampas, Crete.

Museum inventory number 1832. Examined in September 1961. Mastampas or Mastaba (Μασταμπάς) is a locality about three km. southwest of the center of Herakleion.

46. Historical Museum, Herakleion. Æ 20 mm. (PLATE II, 2)

*Provenance:* Gergeri, Crete.

Museum inventory number 1500. Examined on May 19, 1967. Gergeri (Γέργερη), in Herakelion nome, is a village on the southeast slopes of Mt. Ida, about four km. west of Ag. Barbara.

47. Historical Museum, Herakleion. Æ 18 mm.

*Provenance:* Crete.

A specimen purchased in Herakleion and deposited at the Museum on May 16, 1967.

48–51. Collection of Nikolaos Metaxas, Herakleion. Æ 20, 20, 19, 20 mm.

*Provenance:* Crete.

These four specimens were found among Mr. Metaxas' collection of coins which he kindly permitted me to examine on April 18, 1966.

52–57. Collection of Nikolaos Metaxas, Herakleion. Æ.  
(PLATE II, 3–4)

*Provenance:* District of Herakleion.

Photographs of these six specimens (nos. I, II, III, VI, X and XI) were communicated to me on August 25, 1966 by the owner. He wrote me that all were found in the district of Herakleion.

58–59. Collection of Nikolaos Metaxas, Herakleion. Æ.

*Provenance:* Herakleion.

Two specimens, photographs of which were sent me by the owner on October 14, 1966.

60. Collection of Nikolaos Metaxas, Herakleion. Æ.

*Provenance:* Ambelouzos, Crete.

A specimen probably of this class (the bottom of the obverse area is obscure), photographs of which (numbered 3 and 4) were sent me by the owner on October 14, 1966. Ambelouzos (Ἀμπελούζος) is just west of Gortyna.



61. Collection of Nikolaos Metaxas, Herakleion. Æ.

*Provenance:* Plora, Crete.

A specimen probably of this class (the obverse is obscure), photographs of which (numbered 7 and 8) were sent me by the owner on October 14, 1966. Plora (Πλώρα) lies about six kilometers south of Gortyna on the edge of the Mesara plain. The village is situated on the site of the archaic Pyloros (cf. J. D. S. Pendlebury, *The Archaeology of Crete* [London, 1939], p. 327).

62. Collection of Nikolaos Metaxas, Herakleion. Æ. (PLATE II, 5)

*Provenance:* Mesara Plain, Crete.

A relatively well preserved specimen, photographs of which (numbered 11 and 12) were sent me by the owner on October 14, 1966.

63. Collection of Nikolaos Metaxas, Herakleion. Æ.

*Provenance:* Afrati, Crete.

A specimen, photographs of which (numbered 15 and 16) were sent me by the owner on October 14, 1966. Afrati (Ἀφράτι) lies about eight km. northwest of Viannos.

64. Collection of Nikolaos Metaxas, Herakleion. Æ. (PLATE II, 6)

*Provenance:* Meseleroi, Crete.

A specimen, photographs of which (numbered 17 and 18) were sent me by the owner on October 14, 1966. Meseleroi (Μεσελέροι) lies about eight km. northwest of Ierapetra and about five km. south of the north coast, near the site of the classical Oleros.

- 65–79. Collection of Nikolaos Metaxas, Herakleion. Æ 18–22 mm. (PLATE II, 7–12, III, 1–3)

*Provenance:* Herakleion.

These 15 specimens, acquired by Mr. Metaxas at various times late in 1966 and in 1967, were examined and photo-

graphed by me in May 1967. All are reported to have been found in Herakleion, but it is of course possible that some came from the "district of Herakleion" rather than from the city itself.

80. Collection of Nikolaos Metaxas, Herakelion. Æ 19 mm.

*Provenance:* Crete.

A specimen acquired by Mr. Metaxas on May 31, 1967.

81. Collection of Nikolaos Metaxas, Herakelion. Æ.

*Provenance:* Xyda, Crete.

A specimen acquired by the owner between June 1967 and February 1970. Xyda (Χιδᾶ), near the ancient site of Lyttos, lies about three km. southeast of Kastelli Pediados.

82. Collection of Nikolaos Metaxas, Herakleion. Æ.

*Provenance:* Bendevis Kamara, Crete.

A specimen acquired by the owner between June 1967 and February 1970. Bendevis Kamara (Μπενδεβί Καμάρα) is a bridge on the road between Herakleion and Knosos.

83–88. Collection of Nikolaos Metaxas, Herakleion. Æ.

*Provenance:* Herakleion, Crete.

Six specimens acquired by the owner in April and June, 1968.

89. Collection of Nikolaos Metaxas, Herakleion. Æ.

*Provenance:* Herakleion airport, Crete.

A specimen acquired by the owner between June 1967 and February 1970.

90. Collection of Nikolaos Metaxas, Herakleion. Æ.

*Provenance:* District of Herakleion.

A specimen acquired by the owner between June 1967 and February 1970.

91–92. Collection of Nikolaos Metaxas, Herakleion. Æ.

*Provenance:* Knosos, Crete.

Two specimens acquired by the owner in May 1968.

- 93–94. Archaeological Museum, Istanbul. Æ 19 mm., 19 mm.  
*Provenance*: unknown.

These two specimens were published by Ismā'il Ghālib, nos. 291–292. Ghālib believed them to be Umayyad coins and proposed to attribute them to Shu'ayb b. Ḥamīd, a governor during the rule of Yazīd II, 101–105 H. He rejected Lane-Poole's attribution of no. 98, below, to Shu'ayth b. Ḥāzim, remarking that the style was more Umayyad than 'Abbāsīd.

95. Archaeological Museum, Istanbul. Æ 21 mm.  
*Provenance*: unknown.

A specimen communicated to me by a pencil rubbing by Mr. Ibrahim Artuk in October 1956.

96. Archaeological Museum, Khanya, Crete. Æ 20 mm.  
*Provenance*: Crete, presumably Khanya nome.

A specimen found among miscellaneous coins of unrecorded provenance on April 14, 1966.

97. Hermitage Museum, Leningrad. Æ, 19 mm., 2.57 gr.  
 (silver washed). (PLATE III, 4)  
*Provenance*: unknown.

Museum inventory number 3015, published and illustrated by A. Bykov in 1958 (see bibliography, p. vii). I am indebted to Mr. Bykov for the photograph which he sent in December 1956.

98. British Museum, London. Æ 18 mm., 2.83 gr. (PLATE III, 5)  
*Provenance*: Greece.

This specimen was originally published by Lane-Poole (*BMC IX*, p. 100, no. 156<sup>s</sup>) and was attributed by him to Shu'ayth b. Ḥāzim, governor of Damascus. Walker republished the coin in *NC* 1953, p. 128, no. 6, where the reference to Lane-Poole's catalogue number is wrongly given as 156<sup>G</sup>. The specimen was bought from J. P. Lambros of Athens in 1876. Its original provenance, whether Crete or the mainland of Greece, is unknown.

99–101. British Museum, London. Æ 18 mm., 18 mm., 18 mm.,  
2.37 gr., 2.31 gr., 2.53 gr. (PLATE III, 6–8)

*Provenance*: almost certainly Crete.

These three specimens were acquired in the Cameron bequest in 1947 (6.6.1947, 1588–1590). For the Cameron bequest see Class B, no. 1.

102. Collection of Richard Falkiner, London. Æ 21 mm.,  
2.10 gr. (PLATE III, 9)

*Provenance*: unknown.

A photograph of this specimen was kindly sent me by the owner in October 1967.

103. Museo Arqueológico Nacional, Madrid. Æ.

*Provenance*: probably Spain.

A poorly preserved specimen, the name on the reverse is obscure. I found it in June 1958 among a lot of 100-odd unsorted coppers, mostly of Spanish late 3rd century H. types.

104. ANS. Æ 21 mm., 2.62 gr. (PLATE III, 10)

*Provenance*: Crete.

A specimen presented to the Museum (53.45) through Mr. Sydney P. Noe by Dr. Giamalakakis of Herakleion.

105. ANS. Æ 20 mm., 2.00 gr. (PLATE III, 11)

*Provenance*: unknown.

This specimen, formerly in the Howland Wood collection, was acquired by Mr. Wood from Thomas L. Elder, the New York dealer, in December 1907, presumably in the auction of December 19, 1907. There were many miscellaneous lots in this auction, and it is possible that the specimen was in a lot of 100 miscellaneous "Foreign copper and nickel coins" (no. 637), containing coins of "Baroda, Crete, Holland, Columbia, Germany, Austria, Persia, etc.;" but this gives no clue to the original provenance.

106. ANS. Æ 20 mm., 2.74 gr. (PLATE III, 12)

*Provenance:* unknown.

The gift of an anonymous donor in 1954 (54.236). Unfortunately my interest in the Amirs of Crete did not begin until 1955 and hence no effort was made at the time to record the provenance.

107. ANS. Æ 19 mm., 2.64 gr. (PLATE IV, 1)

*Provenance:* Greece.

This specimen was presented to the Museum in 1958 (58.206) by Mr. E. S. Sepheriades of Athens. Whether the original provenance was the Greek mainland or Crete itself it is impossible to say.

108. ANS (permanent loan from the University Museum, Philadelphia). Æ 21 mm., 3.46 gr. (PLATE IV, 2)

*Provenance:* probably Egypt.

This specimen was illustrated in Miles, *D.O. Papers*, 18, fig. 7, and in Miles, "Genealogy," fig. 2. Presumably it came from the Yacoub Artin Pasha collection, presented to the University Museum in 1902 by Robert C. H. Brock.<sup>24</sup> As most of the Artin Pasha collection was formed in Egypt it is reasonable to suppose that Egypt was the provenance of this piece.

109. ANS. Æ 20 mm.

*Provenance:* Crete.

A specimen presented to the Museum in April, 1966 (ANS 66.190) by Mr. E. S. Sepheriades of Athens. The coin is reliably reported to have come from Crete.

110. Ashmolean Museum, Oxford. Æ 20 mm., 2.54 gr. (double struck). (PLATE IV, 3)

*Provenance:* Syria or Palestine.

A gift of Charles Warren, acquired in 1888. A letter from Charles Warren addressed to the Librarian of the Bodleian and dated October 19, 1875, at Waltham Abbey reads in

<sup>24</sup> Cf. G. C. Miles, "Some early Arab dinars," in *ANSMN* 3 (1948), p. 93.

part: "... the cufic coins I presented to the Bodleian Library ... were not found in the excavations at Jerusalem. They were collected by me from the fellahîn and others at my own expense during my stay in Syria and come from all parts of Syria, but principally from Nablous, Gasa and Jaffa. ... The coins in Syria are found on the surface of the ground for the most part after heavy rain or when ploughing." The donor and writer of the foregoing note was undoubtedly Lieut.-General Sir Charles Warren, G.C.M.G., K.C.B., F.R.S., R.E., author of a number of works including *Plans, Elevations, Sections, etc., Showing Results of Excavations at Jerusalem, 1867-70* (n.d.); *Underground Jerusalem...with a Narrative of an Expedition through the Jordan Valley...* (London, 1876); *The Temple or the Tomb, Giving Further Evidence in Favour of the Authenticity of the Present Site of the Holy Sepulchre...* (London, 1880), etc.

I am indebted to Miss Helen Mitchell for providing me with accession information about this and other specimens in the Ashmolean.

III. Ashmolean Museum, Oxford. Æ 20 mm., 2.25 gr.  
(PLATE IV, 4)

*Provenance*: unknown.

This specimen was formerly in the Christ Church collection and was listed as no. 43 in a manuscript handlist prepared by Stanley Lane-Poole and now preserved in the Heberden Coin Room at the Ashmolean. Lane-Poole described the coin as "worn and obliterated" and included it in the category of "Governors' names, Amawi and 'Abbāsi." No provenances are given for any coins in this handlist.

II2. Ashmolean Museum, Oxford. Æ 20 mm., 3.10 gr.  
(PLATE IV, 5)

*Provenance*: unknown.

Formerly in the Christ Church collection and listed in Lane-Poole's handlist as no. 45 (see no. III, above).

113. Ashmolean Museum, Oxford. Æ 20 mm., 2.44 gr. (very badly worn).

*Provenance:* unknown.

This specimen was presented in December 1954 by John Walker, late Keeper of the Department of Coins and Medals at the British Museum.

114. Ashmolean Museum, Oxford. Æ, 2.66 gr.

*Provenance:* unknown.

Baldwin's, 1966, ex Philip Thorburn collection, ex Glendining.

- 115–118. Museo Cufico Naniano, Padova (?). Æ 20 mm., 21 mm., 21 mm., 22 mm.

*Provenance:* unknown.

These four specimens were published and illustrated by line drawings by Assemani, nos. XV, XVI, XVII and XXX (cf. Tiesenhausen, no. 2559). I have not been able to determine the present whereabouts of this collection; evidently it has been dispersed.<sup>25</sup>

119. Rethymnon Museum, Crete. Æ 20 mm. (PLATE IV, 6)

*Provenance:* Crete, presumably Rethymnon nome.

I found this specimen among thousands of miscellaneous unsorted coins in the Rethymnon Museum on April 15, 1956. See also no. 120, below, and Class H, no. 9, Class K, no. 56, Class M, no. 10, Class O, no. 9, and Class P, no. 3.

120. Rethymnon Museum, Crete. Æ 19 mm.

*Provenance:* Crete, presumably Rethymnon nome.

See no. 119, above.

121. Gymnasium, Viannos, Crete. Æ.

*Provenance:* Crete, presumably Herakleion nome.

<sup>25</sup> I am indebted to my friends Paul Balog and Philip Grierson for their efforts to determine the present location of the coins in the Museo Cufico Naniano.

I found this specimen among a small lot of miscellaneous unsorted coins in the collection of the Gymnasium at Viannos on April 10, 1956. Viannos (Βιάννος) is situated on the lower southern slopes of Mt. Dikte about six km. from the south coast.

122. Collection of David G. Briggs, Washington, D.C. Æ 20 mm.

*Provenance:* District of Herakleion.

A specimen acquired by the owner in 1967 or early 1968.

123. Youloundas collection, Yannoudi (Rethymnon), Crete. Æ 21 mm.

*Provenance:* vineyard above Yannoudi.

An obscure specimen, much worn, in a small collection of antiquities and coins belonging to Gen. (retired) Georgios S. Youloundas (Γιουλοῦντας), resident in the village of Yannoudi (Γιαννοῦδι) in the hills a few kilometers southeast of Rethymnon. I examined the coin on April 15, 1956.<sup>26</sup>

<sup>26</sup> After a day spent in recording and photographing the coins in the Museum and in copying Turkish inscriptions about the town of Rethymnon, I was told by the custodian of the Museum, Mr. Vardakis, that there were some strange inscriptions and designs in a village above the town, and he suggested that among them there might be just the sort of thing I was looking for, that is, epigraphical traces of the Amirs of Crete. My friend, Sanford R. Knapp, and I drove up in the jeep to the end of the road near the hamlet of Yannoudi and walked from there to a vineyard surrounded by walls into which were built a few bits of Byzantine, Venetian and Turkish sculpture. I was accustomed to disappointments of this kind and we were about to return to Rethymnon in the evening light when villagers who had gathered about invited us to call on an American woman who lived nearby. I imagined we would meet the wife of a Greek emigrant returned from the United States. We climbed up the steep outside stairs of a house partly destroyed during the war and were quietly but warmly greeted at the door by a handsome woman, Mrs. Mildred Youloundas, American by birth, formerly of Bayside, Long Island. Many years before, on a tour of the Mediterranean, she had visited Athens and on the Acropolis by moonlight had met the young army officer later to become her husband. She had never returned to America since her marriage. Mrs. Youloundas was distressed that her husband was not there to receive her fellow countrymen, particularly as he was much interested in



124. Location unknown (Vives Collection, Madrid). Æ.

*Provenance*: unknown but probably Spain.

This specimen (the name of Shu'ayb followed by a question mark) was published in Vives, *Dinastías*, no. 341, and was assigned by him to the "rebels" of the late 3rd century H. The ownership of the single specimen of this type in Vives' corpus is indicated on p. 481. At the time of the publication of my *Umayyads of Spain*, unaware of the existence of coins of the Amirs of Crete, I adopted Vives' attribution and therefore the specimen appears as no. 181(g) in that work. Walker in a review of *Umayyads of Spain* (NC 1950, p. 176) and again in his article in NC 1953, p. 129, called attention to the misattribution.

125. Location unknown. Æ.

*Provenance*: unknown.

A specimen listed by Fraehn in a manuscript catalogue, XXXII, fol. 27, recto; see Tiesenhausen, no. 2559.

This class, with the name of Shu'ayb on the reverse and the second *lā'* of the declaration of faith rather clumsily on the second line of the obverse area, is the largest of preserved specimens of the Amirs. The attribution of these coins to Shu'ayb, the son of the conqueror abū-Hafṣ, rather than to the putative third Shu'ayb (b.) Aḥmad, would seem almost certain, especially in view of his evidently very long reign. The epigraphy, somewhat primitive for the period, in general resembles that on the undated copper coins of Spain attributed by Vives to the last third of the 3rd century and the beginning of the 4th century H.<sup>27</sup>

archaeology, and messengers were sent to call him down from vineyards higher up the mountain slopes. After some time, despite the gracious reception of our hostess, I became somewhat impatient to get away, as night had fallen. The general, a charming gentleman, finally arrived and after a talk we were on the point of leaving when he brought out his little collection of sherds, figurines and coins which he had picked up from time to time on his property. Among them was this coin.

<sup>27</sup> Cf. Miles, *Umayyads of Spain*, pp. 227-234.

## CLASS G

*Shu'ayb b. abī-Hafṣ 'Umar**Fals**Obverse*

لا اله الا  
الله وحده  
لا شريك له

*Reverse*

محمد  
رسول  
الله  
شعيب

Borders vary: inner linear, outer dotted; double partly linear, partly dotted; double dotted; single dotted.

Borders vary: triple partly dotted, partly linear; double dotted; single dotted.

1. Yockers Collection, Allentown, Pennsylvania. Æ 17 mm., 1.55 gr. (PLATE IV, 7)

*Provenance*: unknown.

Acquired by Mr. Yockers from a coin dealer in New York in the late 1950's.

2. Royal Coin Cabinet, Copenhagen. Æ 19 mm., 1.81 gr. (PLATE IV, 8)

*Provenance*: probably Egypt.

This is no. 740 of Østrup's catalogue, listed among copper coins of uncertain period. The name beneath the reverse was given as "Sa'īdun," but I examined the coin in September 1955 and was able to identify it as a specimen of Shu'ayb. The coin was given to the Cabinet in 1857 by a Danish merchant by the name of A. Polack who spent some years in Alexandria (information kindly furnished by Dr. Otto Mørkholm).

3. Historical Museum, Herakleion. Æ 17 mm. (PLATE IV, 9)

*Provenance*: "River by Knosos," presumably the Keratos.

Museum inventory number 1710, examined and identified by me in September 1961. The coin was apparently pierced

at 3:30 o'clock of the obverse, and the hole subsequently filled with a deposit of hard clay.

The only difference between these coppers and those of Class F is in the fact that the second *lā'* of the *shahadah* is in its normal position on the third line of the obverse. The lettering is somewhat finer than that of Class F, and the fabric thinner.

### CLASS H

*Shu'ayb b. abī-Hafṣ 'Umar*

#### *Fals*

##### *Obverse*

لا اله  
الا الله

##### *Reverse*

محمد  
رسول  
الله  
شعيب

Borders vary: linear; beaded; inner dotted, outer linear.      Borders vary: linear; beaded ?; dotted.

1-4. Yockers Collection, Allentown, Pennsylvania.

Æ 19 mm., 16 mm., 16 mm., 17 mm., 1.39 gr., 0.52 gr., 0.80 gr., 1.03 gr. (PLATE IV, 10-12)

*Provenance*: unknown.

Acquired by Mr. Yockers from a coin dealer in New York in the late 1950's.

5. Archaeological Museum, Herakleion. Æ 17 mm. (PLATE IV, 13)

*Provenance*: Crete.

Published in *Κρητικά Χρονικά* 1956, p. 368, no. 6. I found the specimen among unsorted and unidentified coins of all periods in the Museum in April 1956.

6. Archaeological Museum, Herakleion. Æ 18 mm.

*Provenance*: Kalo Khorio, Crete.

A specimen presented to the Museum by G. Aretakis in 1962 and examined by me on April 18, 1966. It was found in a locality known as Kamares near Kalo Khorio Pediados (Καλὸ Χωριό) Herakleion nome. There is a pellet between the two lines of the obverse.

7. Archaeological Museum, Herakleion. Æ 18 mm.

*Provenance:* Phaistos or Ag. Triada, Crete.

A specimen in a lot of miscellaneous surface finds of all periods from Phaistos or Ag. Triada, examined at the Museum on April 18, 1966. A pellet is preserved between the two lines, and another beneath the second line, of the obverse.

8. Archaeological Museum, Khanya, Crete. Æ 14 mm.  
(PLATE V, 1)

*Provenance:* Crete, presumably Khanya nome.

A specimen found among miscellaneous coins of unrecorded provenance on April 14, 1966. The coin is very poorly preserved. It is curious that there appears to be insufficient room for the word الله on the obverse or for the word محمد on the reverse, although to judge by the border the coin is not clipped.

9. Rethymnon Museum, Crete. Æ 16 mm. (PLATE V, 2)

*Provenance:* Crete, presumably Rethymnon nome.

A specimen examined on April 15, 1956. See Class F, no. 119.

10. Soret Collection. "Très-petit fels."

*Provenance:* unknown.

A specimen described by F. Soret in "Lettre à M. Sawelief," *RNB* 1854, p. 291, no. 23. Soret attributed the coin to Shu'ayth b. Hāzim (cf. Tiesenhausen, no. 2560, citing a manuscript note by Fraehn, also suggesting this attribution; mentioned by Walker, *NC* 1953, p. 129, no. 7).

These *fulūs* are quite similar to those of Class G in fabric but differ from them in the fact that the obverse has a short two-line form of the *shahadah*, only the words *lā ilaha illā'llāh*. They are thinner in fabric and smaller in diameter than the majority of Class F.

## CLASS I

*Shu'ayb b. abī-Ḥafṣ 'Umar*

*Fals*

*Obverse*

لا اله  
الا الله

*Reverse*

محمد  
رسول الله  
شعيب

Borders vary: dotted; linear?; Border of dots.  
inner dotted, outer linear?

- 1-4. Yockers Collection, Allentown, Pennsylvania. Æ  
19 mm., 18 mm., 18 mm., 17 mm., 2.02 gr., 1.13 gr.,  
0.98 gr., 1.36 gr. (PLATE V, 3-5)  
*Provenance*: unknown.

Acquired by Mr. Yockers from a coin dealer in New York  
in the late 1950's.

5. Archaeological Museum, Herakleion. Æ 18 mm.

*Provenance*: Crete.

Examined at the Museum on May 25, 1967.

6. Archaeological Museum, Herakleion. Æ, clipped.

*Provenance*: Unknown (Crete).

A specimen found unidentified in a tray in the coin room.  
Examined February 18, 1970.

7. Collection of Nikolaos Metaxas, Herakleion. Æ 17 mm.  
(PLATE V, 6)

*Provenance*: Herakleion.

A specimen of thin fabric with very crude legends,  
examined and photographed in May 1967.

These coins resemble Class G and Class H in having the two-line obverse, and they differ from Class H only in having a different arrangement of the words *Muḥammad rasūl Allāh* on the reverse.

CLASS J

*Shuʿayb b. abī-Ḥafṣ ʿUmar*

*Fals*

*Obverse*

محمد  
رسول  
الله  
شعيب

*Reverse*

محمد  
رسول  
الله  
شعيب

Border of dots.

Border of dots.

1. Archaeological Museum, Herakleion. Æ 19 mm. (PLATE V, 7)

*Provenance*: Crete.

Published in *Κρητικά Χρονικά* 1956, p. 368, no. 7. This specimen is a muling of two reverses of one of the types with Shuʿayb's name on the reverse. The lettering on one side is somewhat heavier and cruder than that on most specimens.

CLASS K

*Shuʿayb b. abī-Ḥafṣ ʿUmar and ʿUmar*

*Fals*

*Obverse*

لا اله الا  
الله وحده لا  
شريك له  
عمر

*Reverse*

محمد  
رسول  
الله  
شعيب

Border appears almost always to be triple: linear enclosed by two dotted.

Double or single dotted border.

1. Numismatic Museum, Athens. Æ 20 mm.

*Provenance:* Melidokhori, Crete.

For the provenance of this specimen see Class F, no. 3.

2. Copenhagen, Royal Coin Cabinet. Æ 19 mm., 1.69 gr.  
(PLATE V, 8)

*Provenance:* unknown.

Only the first letter of 'Umar's name is preserved, and the name of Shu'ayb is almost totally effaced, but the specimen doubtless belongs to this class. The coin was published in Østrup's catalogue (no. 686) among Umayyad coppers without mint name; I examined and identified it at the Coin Cabinet in September 1955. No record exists of the provenance or manner of acquisition of this specimen.

3. Corinth Excavations. Æ 20 mm.

*Provenance:* Corinth, Agora, S.C.

An obscure specimen, registered April 11, 1938, among coins with inventory numbers 203-252. The associated coins had no archaeological relevance, ranging in date from ca. 400 B.C. to the mid-11th century.

4. Corinth Excavations. Æ 21 mm.

*Provenance:* Corinth, "North of the School."

A specimen (reverse effaced) registered May 19, 1934, no. 1. "North of the School" doubtless signifies north of Oakley House.

5. Archaeological Museum, Herakleion. Æ.

*Provenance:* Acropolis, Gortyna, Crete.

This badly damaged specimen, an enlarged photograph of which was furnished me by Mr. Stylianos Alexiou at the request of Professor Doro Levi in 1955, was found during the Italian excavations at Gortyna in 1954 (inventory number "N. Prot. 1064, Pos. IX").

- 6-7. Archaeological Museum, Herakleion. Æ.

*Provenance:* Herakleion.

These two specimens were found while excavating for the foundations of the Astir Hotel in 1955 (cf. Class F, nos. 12–15). They were published in Miles, *Κρητικά Χρονικά* 1955, p. 150, nos. 2 and 5.

8. Archaeological Museum, Herakleion. Æ 20 mm.

*Provenance*: Crete.

A specimen with the name on the obverse obscure but probably ‘Umar, found at the Museum in April 1956 among unsorted and unidentified coins of all periods. Published in *Κρητικά Χρονικά* 1956, p. 369, no. 9.

9. Archaeological Museum, Herakleion. Æ 19 mm. (PLATE V, 9)

*Provenance*: Crete.

Cf. no. 8, above. *Κρητικά Χρονικά* 1956, p. 369, no. 10.

10. Archaeological Museum, Herakleion. Æ 19 mm.

*Provenance*: Crete.

Cf. no. 8, above. The name of Shu‘ayb is effaced. *Κρητικά Χρονικά* 1956, p. 369, no. 11.

11. Archaeological Museum, Herakleion. Æ 19 mm. (PLATE V, 10)

*Provenance*: Crete.

Cf. no. 8, above. *Κρητικά Χρονικά* 1956, p. 369, no. 12.

12. Archaeological Museum, Herakleion. Æ 19 mm. (PLATE V, 11)

*Provenance*: Crete.

Cf. no. 8, above. *Κρητικά Χρονικά* 1956, p. 369, no. 13; also illustrated in Miles, *D.O. Papers*, 18, fig. 8.

13. Archaeological Museum, Herakleion. Æ 19 mm. (PLATE V, 12)

*Provenance*: Crete.

Obverse badly corroded. Cf. no. 8, above. *Κρητικά Χρονικά* 1956, p. 369, no. 14.



14. Archaeological Museum, Herakleion. Æ 19 mm.

*Provenance:* Phaistos or Ag. Triada, Crete.

A specimen in a lot of miscellaneous surface finds of all periods from Phaistos or Ag. Triada, examined at the Museum on April 18, 1966.

15. Archaeological Museum, Herakleion. Æ 20 mm.

*Provenance:* Gortyna.

A very obscure specimen, almost certainly of this class, recorded as having come from Gortyna (Gortys) and examined at the Museum on April 18, 1966. The fabric is quite thin.

16. Archaeological Museum, Herakleion. Æ 20 mm.

*Provenance:* Ag. Ioannis, Crete.

A specimen presented by Sokrates Kaloyerakis on January 4, 1963, and examined at the Museum on April 18, 1966. It was found in the cistern (*dexameni*) at Ag. Ioannis, a suburb east of Herakleion on the road to Knosos.

17. Archaeological Museum, Herakleion. Æ.

*Provenance:* Herakleion.

A specimen examined on May 25, 1967, labeled “Ἐκ τράπεζα” (cf. Class F, nos. 16–17).

18–19. Archaeological Museum, Herakleion. Æ.

*Provenance:* Crete.

Two specimens examined on May 25, 1967. No record of provenance.

20. Archaeological Museum, Herakleion. Æ.

*Provenance:* Tylisos, Crete.

A specimen examined on May 25, 1967. The accompanying label indicates that the coin came from the property of a certain N. Papazoglou. Tylisos (Τύλισος), on the site of the ancient locality of that name, lies about nine km. southwest of Herakleion.

21. Archaeological Museum, Herakleion. Æ.

*Provenance:* Ellenika Knosou, Crete.

A specimen examined on May 25, 1967. The label records the provenance and the fact that the coin was given to the Museum by Argiro Angelaki. Ellenika Knosou (Ἑλληνικά Κνωσοῦ) is the name given to a locality in the vicinity of Knosos near the Villa Ariadne.

22. Archaeological Museum, Herakleion. Æ.

*Provenance:* Metropolis, Crete.

A specimen found on the football field at Metropolis (Μητρόπολης) Mesara plain, and brought to the Museum in 1967; examined February 18, 1970.

23-24. Archaeological Museum, Herakleion. Æ.

*Provenance:* Kounavoi Pediados, Crete.

Two specimens found at Kounavoi Pediados and brought to the Museum on July 4, 1968, examined February 18, 1970. Kounavoi (Κουνάβοι Πεδιάδος) is a village about three kilometers east of Arkhanai in Herakleion nome.

25. Archaeological Museum, Herakleion. Æ.

*Provenance:* Rotasi, Crete.

A specimen found at Rotasi (Ροτάσι) in the Mesara plain (ancient Rytion) and brought to the Museum on July 22, 1968; examined February 18, 1970. Rotasi is a village located about seven km. east of Kharakas in the Mesara.

26. Archaeological Museum, Herakleion. Æ.

*Provenance:* Metropolis, Crete.

A specimen found at Metropolis in the Mesara plain and brought to the Museum sometime between June 1967 and February 1970. The coin bears the accession number 2312. Examined February 18, 1970.

27. Archaeological Museum, Herakleion. Æ.

*Provenance:* Khersonesos, Crete.

A specimen found by a woman on her property near the shore at Khersonesos (Χερσονησός) sometime between June 1967 and February 1970; examined February 18, 1970.

28. Historical Museum, Herakleion. Æ 21 mm. (PLATE V, 13)  
*Provenance:* Phoinikia, Crete.

This specimen, published in Κρητικά Χρονικά 1956, pp. 368–9, no. 8, and illustrated in Miles, "Genealogy," fig. 3, was found in a vineyard near Phoinikia, about six km. southwest of Herakleion.

29. Historical Museum, Herakleion. Æ 20 mm.  
*Provenance:* "River by Knosos," presumably the Keratos.  
 Museum inventory number 1709, examined and identified in September 1961.

30. Historical Museum, Herakleion. Æ 20 mm. (PLATE V, 14)  
*Provenance:* Garypa Pediados, Crete.

Museum inventory number 1784, examined and identified in September 1961. Presumably the village of Γαρύπα Πεδιάδος (thus in the Museum register) is to be identified with Garipa (Γαρίπα) located about 14 km. west of Viannos and about eight km. south of Arkalokhori, which lies on the road from Viannos to Herakleion. There is also a village by the name of Garipa in the eparchy of Milopotamos in Rethymnon nome.

31. Historical Museum, Herakleion. Æ 19 mm.  
*Provenance:* Ag. Petros excavations, Herakleion.

The obverse is obscure and the reverse almost completely obliterated, but the specimen is probably of this class. The coin was found on June 1, 1967 in sifting soil excavated on May 29 in Trench B of the excavations at Ag. Petros (inventory no. C48). The approximate depth of the find was 4.82 meters beneath the surface (2.85 meters above sea level). The identifiable pottery at this level ranged in approximate date from the 10th to the first half of the 12th century.

32. Historical Museum, Herakleion. Æ 20 mm. (PLATE VI, 1)

*Provenance:* Ag. Petros excavations, Herakleion.

This specimen was found on June 2, 1967 in sifting soil excavated on May 31 in Trench A-2 of the excavations at Ag. Petros (inventory no. C54). The depth of the find was between 1.82 and 1.55 meters above sea level, approximately 5.50 meters beneath the surface. The pottery at this level ranged in date from the 9th to the 12th century and included sherds probably to be identified as Islamic. The coin was found firmly adhering to a sherd of unglazed red ware with wheel ridges of indeterminate date.

33. Historical Museum, Herakleion. Æ 19 mm., pierced.

*Provenance:* Crete.

A specimen purchased by me from an antique dealer in Herakelion and presented to the Historical Museum on May 27, 1967.

34. Collection of Nikolaos Metaxas, Herakleion. Æ 20 mm.  
(PLATE VI, 2)

*Provenance:* Crete.

A specimen found in Mr. Metaxas' collection which he kindly permitted me to examine on April 18, 1966.

- 35-37. Collection of Nikolaos Metaxas, Herakleion. Æ.  
(PLATE VI, 3, 4)

*Provenance:* District of Herakleion.

Three specimens, photographs of which (numbered IV, V and IX) were communicated to me by the owner on August 25, 1966.

- 38-39. Collection of Nikolaos Metaxas, Herakleion. Æ.  
(PLATE VI, 5, 6)

*Provenance:* Herakleion.

Two specimens, photographs of which were sent me by the owner on October 14, 1966.

40. Collection of Nikolaos Metaxas, Herakelion. Æ. (PLATE VI, 7)

*Provenance:* Pakio, Crete.

A well preserved specimen, photographs of which (numbered 13 and 14) were sent me by the owner on October 14, 1966. I have not been able to locate Pakio (Πακινό) on any map of Crete, but I have been informed that it is a formerly Turkish hamlet in the Rethymnon nome near Karinai (Καρίναι), a village about four km. north of Spili (Σπήλιον).

- 41-43. Collection of Nikolaos Metaxas, Herakleion. Æ 18-20 mm., one pierced. (PLATE VI, 8-10)

*Provenance:* Herakleion.

These specimens, all three reportedly from Herakleion, were examined and photographed in May 1967.

44. Collection of Nikolaos Metaxas, Herakleion. Æ.

*Provenance:* Eleutherna, Crete.

A specimen acquired by the owner in November 1967; examined February 18, 1970. Eleutherna (Ελεύθερνα), near the ancient site by the same name, is located north-east of Arkadi Monastery.

45. Collection of Nikolaos Metaxas, Herakleion. Æ.

*Provenance:* Arkhanai, Crete.

A specimen acquired by the owner in December 1968; examined February 18, 1970.

46. Collection of Nikolaos Metaxas, Herakleion. Æ.

*Provenance:* Herakleion.

A specimen acquired by the owner between June 1967 and February 1970; examined February 18, 1970.

47. School Museum, Khamalevri, Crete. Æ.

*Provenance:* Khamalevri, Crete.

A specimen found in a field of the village of Khamalevri, Rethymnon nome, and preserved in the little museum of

the communal school. A pencil rubbing was very kindly sent me on November 17, 1969 by Professor Paul Faure of Paris, who had seen the specimen in a collection of coins, chiefly Byzantine and Venetian, recovered in fields near the village. Khamalevri (Χαμαλεύρι) is located a short distance from the shore about ten km. east of Rethymnon.

48. Hermitage Museum, Leningrad. Æ 21 mm., 2.99 gr.  
(PLATE VI, 11)

*Provenance:* unknown.

Museum inventory number 3014, published by A. Bykov (see bibliography, p. vii), p. 66, and presumably the same specimen as that listed by Markov in his Inventory, p. 62, no. 1162 (شعيب and عمر).

49. British Museum, London. Æ 20 mm., 2.34 gr. (PLATE VI, 12)

*Provenance:* Greece.

Originally published by Lane-Poole in *BMC IX*, p. 100, no. 156<sup>t</sup> (cf. Walker, *NC* 1953, p. 128, no. 5). Lane-Poole attributed the coin to Shu'ayth b. Ḥāzīm. The specimen was bought from J. P. Lambros of Athens in 1876. Its original provenance, whether Crete or the mainland of Greece, is unknown. Cf. Class F, no. 98.

50. British Museum, London. Æ 20 mm., 2.60 gr. (PLATE VII, 1)

*Provenance:* almost certainly Crete.

A specimen acquired in the Cameron bequest in 1947 (6.6.1947, 1586). Cf. Class B, no. 1.

51. British Museum, London. Æ 21 mm., 3.36 gr. (PLATE VII, 2)

*Provenance:* almost certainly Crete.

A specimen acquired in the Cameron bequest in 1947 (6.6.1947, 1587). The name of Shu'ayb is largely effaced. Cf. Class B, no. 1.

52. Museo Stefano de Mainoni, Milan. Æ.

*Provenance*: unknown.

A doubtful specimen, listed by G. Schiepati in *Mainoni*, no. XXVIII. The name beneath the obverse is effaced. Whether inadvertently or not, the word *lā'* in the obverse area is transcribed on the third, rather than the second, line. Tiesenhausen wrongly refers to this specimen under no. 2559 (type of Shu'ayb alone). A further complication is that Schiepati wrote "Fu pubblicata da Assemani," with reference to *Museo Cufico Naniano*, no. XV (see Class F, nos. 115–118): did he mean similar to these? But if there is a "voce svanita" beneath the obverse (aside from the placement of the *lā'* in the transcription), it is not similar.

53. ANS. Æ 20 mm., 2.53 gr. (PLATE VII, 3)

*Provenance*: said to have been acquired in Germany.

A specimen acquired by the American Numismatic Society from Mr. Gordon Robertson in 1956 (56.114).

54. Ashmolean Museum, Oxford. Æ, 3.01 gr.

*Provenance*: unknown.

Baldwin's, 1966, ex Philip Thorburn collection, ex Glendining.

55. Cabinet des Médailles, Paris. Æ 18 mm., 2.80 gr.

*Provenance*: unknown.

Published by Lavoix, no. 1657 (mentioned by Walker, *NC* 1953, p. 128). According to my friend Raoul Curiel no record of the provenance of the specimen or of the date of accession is preserved.

56. Rethymnon Museum, Crete. Æ 20 mm. (PLATE VII, 4)

*Provenance*: Crete, presumably Rethymnon nome.

The name on the reverse is almost totally effaced. The specimen was found and identified by me at the Museum on April 15, 1956.

57. Present location unknown ("former Bose Collection").

*Provenance*: unknown.

Tiesenhausen, no. 2561, lists a specimen (the name of 'Umar questioned) with the reference "Fraehn, Consp." Bose doubtless was Curt Bose, author of *Ueber Arabisch-Byzantinische Münzen: Sendschreiben an Herrn F. de Saulcy in Metz* (Grimma, 1840).

These *fulūs* with the name of 'Umar on the obverse and that of Shu'ayb on the reverse constitute the second largest category of coins of the Amirs. That they are closely related to Class F with Shu'ayb's name alone is indicated not only by their style and the similarity of the reverse but also by the position of the word *lā'* on the second line of the obverse.<sup>28</sup> Walker (NC 1953, p. 128) attributed these coins to abū-Ḥafṣ 'Umar about A.D. 850 with the name of his son and successor, Shu'ayb; but he suggested also the alternative that they might belong to Shu'ayb with a putative son of his named 'Umar, who might have been the grandfather of the last Amir. Mrs. Welin (NC 1955, p. 213) preferred to eliminate Walker's 'Umar II, and by implication therefore would have attributed the type to abū-Ḥafṣ 'Umar with Shu'ayb as successor. Bykov, as noted in the commentary on Class A, above, argued that 'Umar I would not have been in a position to strike coins and therefore attributed the class to Shu'ayb, as did I on the same grounds in "Genealogy," p. 71. Despite the discovery of Class A, I still assign this class to Shu'ayb b. abi-Ḥafṣ with his son and heir designate 'Umar (perhaps Babel?).

<sup>28</sup> It had occurred to me that one might be able to establish the identities among the reverses of Class F and Class K, but most specimens are so worn and the criteria for comparison so limited that this has not proved feasible.



## CLASS L

*Muḥammad b. Shu'ayb**Fals**Obverse*

لا اله الا  
الله وحده لا  
شريك له  
محمد بن

*Reverse*

محمد  
رسول  
الله  
شعيب

Triple border: linear enclosed    Border as obverse (not clear  
by two dotted (not clear on all).    on all).

1. Archaeological Museum, Herakleion. Æ.

*Provenance:* Herakleion.

The name beneath the obverse area is obscure, but the specimen is probably of this type. The coin, examined on May 25, 1967 is labeled "Εκ Τράπεζα" (cf. Class F, nos. 16-17).

2. Archaeological Museum, Herakleion. Æ.

*Provenance:* Kounavoi Pediados, Crete.

A specimen brought in to the Museum on July 4, 1968; examined on February 18, 1970. For the location of Kounavoi see Class K, no. 23.

3. Collection of Nikolaos Metaxas, Herakleion. Æ. (PLATE VII, 5)

*Provenance:* Knosos, Crete.

A specimen, photographs of which (numbered 19 and 20) were communicated to me by the owner on October 14, 1966.

- 4-5. Collection of Nikolaos Metaxas, Herakleion. Æ 20-21 mm. (PLATE VII, 6, 7)

*Provenance:* Herakleion.

Both specimens, reportedly found in Herakleion, were examined and photographed in May 1967.

6. Collection of Nikolaos Metaxas, Herakleion. Æ.

*Provenance:* Herakleion.

A specimen acquired by the owner in June 1968; examined on February 18, 1970.

7. Collection of Nikolaos Metaxas, Herakleion. Æ.

*Provenance:* Arkhanai, Crete.

A specimen acquired by the owner in December 1968; examined on February 18, 1970.

8. ANS. Æ 20 mm., 1.63 gr. (PLATE VII, 8)

*Provenance:* Crete.

This specimen was acquired by the American Numismatic Society (66.70) as a gift from Mr. Jere L. Bacharach who bought it in 1965 from an antique dealer in Herakleion.

9. ANS (permanent loan from the Hispanic Society of America). Æ 20 mm., 1.42 gr. (PLATE VII, 9)

*Provenance:* Spain?

Originally in the collection of Pascual de Gayangos, this specimen has been described and illustrated several times. It first appeared in Codera's *Tratado*, p. 72, no. 7, illustrated by a line drawing in pl. V. There, and in Vives, *Dinastías*, no. 342, the coin was attributed to the "rebels" in Spain toward the end of the 3rd century H.; and in my *Umayyads of Spain*, no. 181(h) and p. 78, I accepted this attribution. Walker, in *NC* 1953, p. 129, no. 8, correctly identified the coin as one of the Amirs of Crete, illustrated it from Codera's drawing on p. 125, and proposed to attribute it to "Babdel, i.e. Abū 'Abdullāh," son and successor to Shu'ayb. I also reproduced Codera's line drawing in "Genealogy," fig. 4. In 1957 the coin itself, "lost" for nearly 80 years, came to light again among thousands stored in a vault in the Hispanic Society of America and overlooked at the time of the transfer of the bulk of Archer M. Huntington's collection

to the American Numismatic Society in 1946–1948.<sup>29</sup> Now incorporated in the ANS collection the coin bears the accession number HSA 57.2144. The envelope in which the specimen was found was similar to those containing other coins identifiable as formerly in the Gayangos collection, and accompanying it were both Vives' ticket with the number 342 and Codera's (or Gayangos'?) original slip of paper attributing the coin to the "rebels." The coin, long believed to be unique and here illustrated by a photograph for the first time, now has nine companion pieces, seven of which, with their well documented Cretan provenance, confirm the validity of Walker's attribution to the Amirs of Crete.

10. Ashmolean Museum, Oxford. Æ, 2.17 gr.

*Provenance*: unknown.

Baldwin's, 1966, ex Philip Thorburn collection, ex Glendining.

There is no question about the reading of the name Muḥammad b. Shu'ayb. The identity of this individual, however, remains a problem, as his name is not recorded in the Arabic and Byzantine written sources. Walker (NC 1953, p. 129) proposed to identify him with Babdel (abū 'Abdullāh), and Mrs. Welin followed this suggestion. In "Genealogy" p. 71, I advanced the idea that he might be the Zerkounis of the Byzantine sources, brother (?) and successor of Babdel. There is really no means, with our present knowledge, of settling the question. A hint that these coins are quite closely related chronologically to Class F and Class K is provided by the position of the word *lā'* on the second line of the obverse area.

<sup>29</sup> Cf. G. C. Miles, "The Ferreira collection of Visigothic Coins," *ANSMN* 12 (1966), p. 129.

## CLASS M

*Yūsuf (b.?) ‘Umar**Fals**Obverse*

لا اله الا  
الله وحده لا  
شريك له  
عمر

*Reverse*

محمد  
رسول  
الله  
يوسف

Borders vary: double dotted;  
inner dotted, outer linear.

Borders vary: double(?)  
dotted; inner dotted, outer  
linear; triple dotted(?);  
single dotted (?).

1. Arkadi Monastery, Crete. Æ 20 mm.

*Provenance:* Area of Ag. Apostoloi, Pantannasa, Voliones, southwest of Arkadi Monastery, Rethymnon nome, Crete.

This specimen, very obscure especially with respect to the two names, was shown to me by the owner, Pro-Hegoumenos Dionysios Psaroudhakis of Arkadi Monastery on April 24, 1956. The villages named above lie near the road west of Mt. Ida between Phourphouras and Rethymnon, in the vicinity of ancient Sybrita.<sup>30</sup>

<sup>30</sup> The accidental finding of this specimen was another of those pleasurable experiences that sometimes reward the discouraged searcher or explorer when least expected. My companion, Sanford R. Knapp, and I had driven up to Arkadi from Rethymnon and Panormos. We were hospitably received by the Arkhontaris and after examining the church, the treasury and the monastery buildings, in which there were no mediaeval remains of interest to me, we were treated to a simple meal of eggs, feta, bread and wine. We turned in early for what turned out to be a mostly sleepless and rather uncomfortable night. During the day the sirocco (*notos* or *livas*) had come in from the south and by nightfall it was blowing a wild gale. There were no panes in the windows of our room, the shutters were broken and banged back and forth incessantly, plaster fell in large chunks from the ceiling and rats scurried across the floor. Our experience was not unlike that of the Rev. Henry F. Tozer at Arkadi in 1874 (*The Islands of the Aegean* [Oxford, 1890], p. 52): "...the pitiless rain [,which] penetrated so

2. Archaeological Museum, Herakleion. Æ 20 mm.

*Provenance:* Crete.

Published in Κρητικά Χρονικά 1956, p. 369, no. 15. The *rā* of the name 'Umar is effaced.

3. Archaeological Museum, Herakleion. Æ 20 mm.

*Provenance:* Crete.

Published in Κρητικά Χρονικά 1956, p. 370, no. 16. The name on the obverse is largely effaced, and only the *sīn* and *fā* of the name Yūsuf on the reverse are preserved.

4. Archaeological Museum, Herakleion. Æ 20 mm. (PLATE VII, 10)

*Provenance:* Xyda, Crete.

A specimen brought to the Museum on August 8, 1968 by a certain Apostolos Tabakakis; examined February 18, 1970. The village of Xyda (Χιδᾶ) lies about two km. east of Kastelli Pediados. Mr. Manolis Borboudakis informed me that the coin was found on a hill east of the village where there are the remains of a 14th century church. Plans have been made to excavate on the site in 1970.

constantly the patched-up roof of the room we occupied, that to avoid it we were frequently obliged to shift our position, and it even dropped on to our beds at night." By dawn we were ready for the road, and after a cup of coffee and a crust of bread we were about to take our leave when we were invited to pay a visit to the aged former abbot of the monastery, Pro-Hegoumenos Dionysios. Of course we did so and over several glasses of powerful home-made *tzikoudia* (or raki) we talked of archaeology and of the famous uprising of 1866. The charming old gentleman gave me as a memento of our visit a fragment of one of the shells fired at the monastery walls by the Turkish artillery during the siege. Finally, as an afterthought just as we were about to leave, Dionysios asked me to look at his little collection of antiquities. There were some bits of pottery, a few battered Greek, Roman and Venetian coins and other oddments. Among them was this coin of the Amirs. On April 17, 1966, I revisited Arkadi Monastery on the occasion of the Second International Cretological Congress and was happy to meet Pro-Hegoumenos Dionysios again. He told me that he had given his coins to Mr. Georgios Voyiatzakis of Athens.

5. Collection of Nikolaos Metaxas, Herakleion. Æ 20 mm.

*Provenance:* Crete.

A specimen found in Mr. Metaxas' collection which he kindly permitted me to examine on April 18, 1966.

6. Collection of Nikolaos Metaxas, Herakleion. Æ 20 mm.  
(PLATE VII, 11)

*Provenance:* Herakleion.

The obverse is obscure but the name of 'Umar is recognizable at the bottom, and Yūsuf is quite clear on the reverse. The specimen was examined and photographed in May 1967.

7. Private collection, Herakleion. Æ.

*Provenance:* Crete.

This specimen, with both names well preserved, was shown me by a Mme. Korpi of Herakleion in April 1956.

8. Private collection, Istanbul. Æ 20 mm. (PLATE VIII, 1)

*Provenance:* unknown.

A pencil rubbing of this specimen, with both names well preserved, was transmitted to me in October 1956 by Mr. Ibrahim Artuk of the Istanbul Arkeoloji Müzeleri. According to the latter the coin was the property of Mahruki Zade Cafer Bey, formerly Turkish Consul in Bombay. Dr. John M. Smith Jr. informs me that this collection is now in the Arkeoloji Müzeleri, and that there is no record of where Cafer Bey, who travelled and collected widely, acquired the coin. The photograph reproduced in the plate was taken for me by Dr. Smith in February 1966.

9. Ashmolean Museum, Oxford. Æ.

*Provenance:* presumably Herakleion.

10. Rethymnon Museum, Crete. Æ 19 mm. (PLATE VIII, 2)

*Provenance:* Crete, presumably Rethymnon nome.

Identified on April 15, 1956. Cf. Class F, no. 119. The specimen is struck badly off center, but the names are clear.

Although there is no trace of the word *bn*, "son," on any of the ten preserved specimens of this class with the name 'Umar on the obverse and the name Yūsuf on the reverse, I proposed in "Genealogy," p. 71, to attribute the coins to a Yūsuf b. 'Umar II (Babdel?). Once again the type appears to be chronologically not far removed from Classes F, K and L because of the position of the word *lā* on the second line of the obverse area. The obverse is of course identical in its legends and appearance with that of Class K, although I have not discovered an actual die identity among the specimens of which I have illustrations.

## CLASS N

*Shu'ayb (b.?) Aḥmad**Fals**Obverse*

لا اله الا  
الله وحده لا  
شريك له  
احمد

Double border of dots.

*Reverse*

محمد  
رسول  
الله  
شعيب

Double border of dots.

1. Agora Excavations, Athens. Æ 20 mm. (PLATE VIII, 3)

*Provenance*: Athenian Agora.

This specimen (excavation field note-book NN iv/27/29, no. 128, inventory no. 1870/128) was published in Miles, *Athenian Agora*, p. 21, no. 3; mention of it was made in Miles, *Hesperia* 1956, p. 344, note 71. The coin was found in 1939 in Turkish fill on the southeast slope of the Kolonos Agoraios (grid reference B 17). Associated coins ranged in date from Hellenistic to Turkish times and hence lend no assistance in the dating of the issue.

2. Archaeological Museum, Herakleion. Æ.

*Provenance:* Herakleion.

This specimen, examined on May 25, 1967, is obscure but probably of this type. It is labeled “Ἐκ Τράπεζα” (cf. Class F, nos. 16–17).

3. Archaeological Museum, Herakleion. Æ.

*Provenance:* Crete.

The name Aḥmad on the obverse is obscure. The coin, a gift from A. Manidakis to the Museum, was examined on May 25, 1967.

4. Historical Museum, Herakleion. Æ 20 mm. (PLATE VIII, 4)

*Provenance:* Herakleion.

Published in Κρητικά Χρονικά 1956, p. 371, no. 21. The Museum records indicate that the coin was found in Herakleion.

5. Archaeological Museum, Khanya, Crete. Æ 19 mm.

*Provenance:* Crete, presumably Khanya nome.

A specimen found among miscellaneous coins of unrecorded provenance examined at the Museum on April 14, 1966. The *alif* of *Aḥmad* on the obverse is obliterated. When I examined the coin I noted that *Aḥmad* may be followed by some letters (*bn?*), but my photograph does not reveal them. If indeed these letters are present the attribution of this class to Shu‘ayb b. Aḥmad (“Genealogy,” p. 72) would of course be wrong. The words *Allāh* and *Shu‘ayb* on the reverse are obscure. The fabric of the coin is thin.

The position of the word *lā’* on the second line of the obverse area connects the issue with Classes F, K, L and M, and it may well be that the coins are not as far as two generations removed from Shu‘ayb II b. abī-Ḥafṣ ‘Umar. On the other hand, Classes O and P, associated with the dinars of 337 (?) and 340 (?), also have the same characteristic.



## CLASS O

‘*Ali b. Ahmad**Fals**Obverse*

لا اله الا  
الله وحده لا  
شريك له  
احمد

*Reverse*

محمد  
رسول  
الله  
على بن

Borders vary: triple, linear enclosed by two dotted; double, inner dotted, outer linear; double, inner linear, outer dotted.

Borders vary: double, inner dotted, outer linear; single dotted.

## 1. Agora Excavations, Athens. Æ 20 mm. (PLATE VIII, 5)

*Provenance*: Athenian Agora.

This specimen (excavation field note-book ΠΠ, western cut, iv/26/56, no. 2719/8) was published in Miles, *Athenian Agora*, p. 20, no. 2. It was found in 1956 in mixed fill in excavations on the southeast slope of the Kolonos Agoraios (grid reference A 16). Associated coins, ranging in date from the 4th century B.C. to Venetian times, afford no clue to dating. The specimen was not catalogued until August 13, 1960, when it turned up among various miscellaneous unclassified coins in the workrooms of the Agora Museum and was shown to me at that time. The reverse is badly cut and very obscure.

## 2. Corinth Excavations. Æ 21 mm. (PLATE VIII, 6)

*Provenance*: Corinth, South Stoa, west.

This specimen was registered September 15, 1937, among coins numbered 11–28. Other coins in this lot were attributed to Michael VII (1071–1078), Nicephoros III (1078–1081), Alexius I (1081–1118), Manuel I (1143–1180) and Alexius III (1195–1203). The coin was illustrated in Miles, “Genealogy,” fig. 6.

3. Archaeological Museum, Herakleion. Æ 22 mm. (PLATE VIII, 7)

*Provenance:* Vyzari, Byzantine basilica.

For the provenance and bibliography, see Class F, no. 22. I examined and photographed the coin at the Archaeological Museum in December 1958.

4. Archaeological Museum, Herakleion. Æ.

*Provenance:* Avdou, Crete.

A very obscure specimen examined in December 1958. The name on the obverse is clear, that on the reverse somewhat doubtful. The village of Avdou (Ἀβδοῦ) is located on the upper course of the Aposelimis River at the foot of the northwestern slopes of Mt. Selena (Dikti or Lasithi range), about four km. south of the town of Mokhos, Herakleion nome.

5. Collection of Nikolaos Metaxas, Herakleion. Æ. (PLATE VIII, 8)

*Provenance:* District of Herakleion.

A specimen, photographs of which (numbered VIII) were sent me by the owner on August 25, 1966.

6. Collection of Nikolaos Metaxas, Herakleion. Æ.

*Provenance:* Knosos, Crete.

A specimen acquired by the owner in May 1968; examined February 18, 1970.

7. Collection of Nikolaos Metaxas, Herakleion. Æ.

*Provenance:* Herakleion.

A specimen acquired by the owner in 1968.

8. British Museum, London. Æ 22 mm., 3.53 gr.

*Provenance:* unknown.

No acquisition ticket accompanies this specimen in the British Museum tray. The name of Aḥmad on the obverse is clear enough; the reverse is very obscure but appears to be of this type.

9. Rethymnon Museum, Crete. Æ 21 mm. (PLATE VIII, 9)

*Provenance*: Crete, presumably Rethymnon nome.

This specimen was examined and identified on April 15, 1956. Cf. Class F, no. 119. It was illustrated in Miles, *D.O. Papers*, 18, fig. 10.

These *fulūs* bearing the name ‘Ali b. Aḥmad, with their established provenances (Herakleion, Knosos, Rethymnon, Vyzari, Athens and Corinth), provide the principal argument for the attribution of the dinars of Classes S and T to the Amirs of Crete. Once more the position of the word *lā*’ on the obverse of the type suggests affinity with classes F, K, L, M and N.

#### CLASS P

‘*Ali* (b.?) *Aḥmad*

#### *Fals*

##### *Obverse*

لا اله الا  
الله وحده لا  
شريك له  
[بن؟] احمد

##### *Reverse*

محمد  
رسول  
الله  
على

Borders vary: single dotted;  
double dotted; triple, linear  
enclosed by two dotted.

Borders obscure.

1. Archaeological Museum, Herakleion. Æ 20 mm. (PLATE VIII, 10)

*Provenance*: Crete.

Published in *Κρητικά Χρονικά* 1956, p. 370, no. 19. The name of Aḥmad is clear on the obverse, but whether *bn* precedes it is uncertain. On the reverse ‘Ali is clear although the *lām* is largely effaced.

2. Archaeological Museum, Herakleion. Æ 20 mm., pierced.  
(PLATE VIII, 11)

*Provenance:* Crete.

Published in Κρητικά Χρονικά 1956, p. 371, no. 20. Only the tops of the letters of the name Aḥmad on the obverse are preserved on the flan; *bn*, if it exists, is off the flan, but there possibly was room for it on the die. The name of 'Ali on the reverse is clear.

3. Rethymnon Museum, Crete. Æ 20 mm. (PLATE VIII, 12)

*Provenance:* Crete, presumably Rethymnon nome.

This specimen was examined and identified on April 15, 1956. Cf. Class F, no. 119. Aḥmad on the obverse is clear, and to judge by the position of the name, toward the left of the flan, other letters must have occupied the space before it, i.e., probably *bn*. 'Ali on the reverse is clear.

I have made a separate category of these three specimens, all of Cretan provenance, because the word *bn*, "son," definitely is not present on the reverse, although it may perhaps precede Aḥmad on the obverse. In any case, there can be little doubt that they are to be attributed to 'Ali b. Aḥmad (Classes O, S and T). It is to be noted that *lā'* is again on the second line of the obverse as on Classes F, K, L, M, N and O.

# CLASS Q

'Ali b. Yūsuf

*Fals*

*Obverse*

لا اله الا  
الله وحده  
لا شريك له

*Reverse*

محمد  
رسول الله  
علي بن يوسف

Borders vary: single dotted;  
inner dotted, outer linear.

(A pellet above the area on  
no. 1)

Borders as obverse.

1. Corinth Excavations. Æ 20 mm. (PLATE IX, 1)

*Provenance:* Corinth, Church of St. John Theologos.

This specimen was registered as no. 6 on April 17, 1935. The envelope contained no other coins.

2. Archaeological Museum, Herakleion. Æ 20 mm. (PLATE IX, 2)

*Provenance:* Crete.

Published in Κρητικά Χρονικά 1956, p. 370, no. 17; also illustrated in Miles, "Genealogy," fig. 7, and in Miles, *D.O. Papers*, 18, fig. 9.

3. Archaeological Museum, Herakleion. Æ 19 mm. (PLATE IX, 3)

*Provenance:* Crete.

Published in Κρητικά Χρονικά 1956, p. 370, no. 18. The name on the reverse is partially effaced, but enough of it is preserved to identify it.

This issue differs from all others, except Class A, in that the full name, 'Ali b. Yūsuf, is on one side of the coin, not divided between obverse and reverse. The fact that two of the three known specimens were found in Crete and the third in Corinth fairly well substantiates attribution to the Amirs of Crete. We have of course no firm evidence that this individual belongs where I have placed him in the tentative genealogy proposed in "Genealogy," p. 70; the attribution is based entirely on the correspondence between the filial relationship indicated on the coin with part of the genealogy of 'Umar the writer, preserved in al-Ḥimyari, and I have had to assume that this source omitted two generations between Yūsuf (b.) 'Umar and abū-Ḥafṣ 'Umar, the conqueror (cf. Miles, "Genealogy," p. 72).

## CLASS R

*Aḥmad b. 'Umar**Dirhem*, 326 H.*Obverse*

لا اله الا  
الله وحده  
لا شريك له  
عمر

*Reverse*

الله  
محمد  
رسول الله  
الراضى بالله  
احمد بن

The ر of عمر has a floral termination.

*Inner margin:* بسم الله ضرب هذا الدرهم  
سنة ست وعشرين وثلاثمائة

*Outer margin:* a few letters of  
Qur'ān XXX, 3–4.

The ن of بن has a floral termination.

*Margin:* Qur'ān IX, 33.

Area enclosed by linear  
border.

I. Archaeological Museum, Istanbul. ⲁ 17 mm., 1.40 gr.  
(pierced and clipped). (PLATE IX, 4)

*Provenance:* unknown.

This unique coin was published, but not illustrated, by Ismā'īl Ghālib, no. 677. It has been illustrated in Miles, "Genealogy," fig. 9 (from an inferior photograph) and in Miles, *D.O.Papers*, 18, fig. 6 (from a photograph taken by myself in 1963). In Ghālib's transcription the names of 'Umar and Aḥmad are followed by small ornaments. I closely examined the coin at the time I photographed it in 1963, and in my opinion what Ghālib took to be an ornament on the obverse is part of the flowering tail of the final letter of 'Umar's name, and on the reverse Aḥmad is followed by *bn*, likewise terminating in an ornamental flourish. In "Genealogy," p. 66 and fig. 7, and in *D.O.Papers*, 18, fig. E, following Ghālib's description and not yet having examined the coin, I omitted the word *bn*, "son," but supplied it hypothetically in parentheses. Ghālib appended a

note explaining that the identification of the names ‘Umar and Aḥmad presented difficulties because of the lack of a mint name.

My principal argument for attributing this coin to the Amirs of Crete is based on the combination of the names ‘Umar and Aḥmad, not otherwise met with in Arab coinage of the period. The name Aḥmad b. ‘Umar suggests the possibility that this person may be the son of ‘Umar II (Class K) and the father of Shu‘ayb III (Class N) and of ‘Ali b. Aḥmad (Class O, and probably P). Notable also is the lack of a mint name, a most unusual feature for a dirhem of the period and comparable to the omission of the mint name on the dinars (except Class U, below) of the Amirs of Crete. It is unfortunate that nothing is known of the provenance of this unique coin.<sup>31</sup> Its location in Istanbul makes it not unlikely that it was found on Turkish soil, and of course in 1894, when Ghālib published his catalogue, Crete was still nominally a part of the Ottoman Empire. Might the coin have come from Crete? Or perhaps from Macedonia (cf. Class S, no. 1)?

#### CLASS S

‘Ali b. Aḥmad

*Dinar*, 337 (?) H.

##### *Obverse*

لا اله الا  
الله وحده  
لا شريك له  
احمد

##### *Reverse*

الله  
محمد  
رسول  
الله  
المطيع لله  
على بن

<sup>31</sup> I am grateful to John M. Smith Jr. for his efforts to determine the provenance. There is no record in the Istanbul Museum of how the coin was acquired.

*Inner margin:* بِسْمِ اللَّهِ ضَرْبَ هَذَا الدِّينَرِ *Margin:* Qur'ān IX, 33  
[sic] ثَلَاثِينَ [؟] وَثَلَاثًا [sic] سَنَةً سَمِ (partly garbled).

*Outer margin:* Qur'ān XXX,  
3-4 (partly garbled).

Area enclosed by linear border. Borders as obverse.

Margin enclosed by linear border.

1. ANS. *AV* 23 mm., 3.85 gr. (PLATE IX, 5)

*Provenance:* Macedonia?

This unique dinar (illustrated in Miles, "Genealogy," fig. 8, and in Miles, *D.O. Papers*, 18, fig. 4) has a rather curious history. It was brought for identification to the Museum of the American Numismatic Society in 1951 by a gentleman by the name of Alan Berry. I was aware of the fact that the piece was unusual in several respects, and as the owner had no particular interest in it the coin was bought for the collection (ANS 51.175). In 1956, after having discovered the copper coins of 'Alī b. Aḥmad in Crete and elsewhere, I recalled this dinar and suspected that it also might be attributed to the Cretan Amirs. Through correspondence I was finally successful in tracking down Mr. Berry, who had moved from the west coast to New York, and he informed me that the coin had formerly belonged to his father-in-law who lived in Xanthi in eastern Macedonia, about 45 km. northeast of Cavalla. For some reason, now forgotten, Mr. Berry believed that the coin may have come originally from Crete, but this opinion may have been influenced by my having told him of the probable attribution.

The assigned date, as can be seen by an examination of the plate, is curiously written, and 337 (or possibly 339?) must be considered questionable. However, the presence of the name of the Caliph al-Muṭī' places the date of issue between 334 and 363 H./A.D. 945-974. If the attribution to the Amirs of Crete is correct the date cannot be later than



350 H./A.D. 961, and since there is a digit (7 or 9), and the writing of the decade in no way resembles *arba'in* (40), the decade must, as it appears to read, be *thalathin* (30).

Whatever the precise date of the coin, there is, I think, a possibility of a connection between its reported provenance and the Arab raids on Mt. Athos, the memory of which is better preserved in legend than in written document. The inclusive dates of al-Muṭī's reign are too late to point to any relationship with the famous Arab attack on Salonika in A.D. 904.<sup>32</sup>

In January 1963 Dr. Andrew S. Ehrenkreutz, during a visit to the Museum of the American Numismatic Society, calculated the specific gravity of this coin and found it to be  $17.2 = 85\%$  fine (assuming the alloy to be silver), not an exceptionally low gold content for a dinar (other than Fāṭimid) of this period.<sup>33</sup>

2. Location unknown. *AV*, pierced.

*Provenance*: unknown.

The attribution of this specimen to the Amirs of Crete is very problematical. In Sotheby's auction catalogue of the J.M.C. Johnson collection, dated 16–18 July, 1906, no. 313, appears the entry "*Gold*. Karmatis. Ali ibn Ahmad. 337 and 340, *pierced* (2)." There is no illustration. Zambaur in *NZ* 1922, p. 15, cites these specimens in a list of Qarmaṭi coins known to him, but evidently he had not seen them and had no information about them other than that in the Sotheby catalogue reproduced above. George T. Scanlon in an article entitled "Leadership in the Qarmaṭian Sect" (*Bulletin de l'Institut Français d'Archéologie Orientale*, 1960, p. 34) also mentions these two specimens, again without

<sup>32</sup> Cf. Miles, "Circulation of Islamic Coinage," p. 495.

<sup>33</sup> Cf. Andrew S. Ehrenkreutz, "Studies in the Monetary History of the Near East in the Middle Ages, II: The Standard of Fineness of Western and Eastern Dinārs Before the Crusades," in *JESHO*, Vol. VI (1963), pp. 253ff.

any information other than the bare listing in the Sotheby catalogue; and in order to establish the probable identification with the Qarmaṭi Ḥasan b. Aḥmad he states, "It is more likely that the correct reading was *Abū 'Alī ibn Aḥmad* and it is by this name that Ḥasan b. Aḥmad is cited by Sibṭ ibn al-Jawzī."

It is to be noted that no mint name is given in the Sotheby list, whereas practically all other entries in this catalogue mention the name of the mint when it is present. All known Qarmaṭi coins bear the names of easily legible mints (Filasṭīn, Dimishq, Ṭarāblus). Might not these two coins be attributable to the same man who issued no. 1? I have made an effort to track down the disposition of these dinars, but without success. The firm of Sotheby & Co. have informed me that lot 313 was purchased by a person named Clements and that they assumed him to be Mr. L. Clements of London, an antique dealer who died about 1936, and a part of whose collection was auctioned on November 16, 1936. There is nothing in the catalogue of this sale in any way suggesting that these coins were included in the auction.

# CLASS T

*'Alī b. Aḥmad*

*Dinar*, 340 H. (?)

1. Location unknown. *N*, pierced.

*Provenance*: unknown.

For the listing and commentary on this specimen see the discussion of Class S, no. 2, above.

## CLASS U

‘Abd al-‘Azīz b. Shu‘ayb

*Dinar*, 343 H.*Obverse*

لا اله الا  
الله وحده  
لا شريك له  
بن شعيب

*Reverse*

الله  
محمد  
رسول الله  
المطيع لله  
عبد العزيز

*Inner margin* (beginning at 1:30): بسم الله ضرب هذا الدينر باقريطش سنة ثلث واربعه.....  
*Margin*: Qur’ān IX, 33 to ولو.....

*Outer margin*: Qur’ān XXX, 3-4, to يفر.....

1. Istanbul, Yapı ve Kredi Bankası. *A* 24 mm., 4.03 gr.  
(PLATE IX, 6)

*Provenance*: unknown.

This unique and important dinar was brought to my attention in August 1966 by Mr. Roy P. Mottahedeh. Subsequently, in response to my request, photographs were kindly furnished me by Mr. Nuri Pere, General Manager of the Yapı ve Kredi Bankası, to whom I am indebted not only for this courtesy but also for permission to publish this coin.<sup>34</sup>

This dinar is of great interest for several reasons. While the end of the rule of ‘Abd al-‘Azīz (the “Kouroupas” of the Byzantine historians) in 350 H./A.D. 961 has been well documented in the written sources, and we already had a small bit of numismatic evidence for his rule in the unique

<sup>34</sup> In March 1967 I read a brief paper on the coin at the annual meeting of the American Oriental Society in New Haven, Conn. Mention is made of the coin in a brochure entitled *Madeni Paralar Sergisi* published by the Yapı ve Kredi Bankası (Istanbul, 1967), p. 8.

dirhem of 350 H. (Class V, below), we now have another firm date: he had been ruling for at least seven years before Nikephoros Phocas took him prisoner in 961. Notable also is the unquestionable evidence that the Amirs were still minting gold toward the end of their rule in Crete. The problem of 'Abd al-'Azīz's line of descent from the Arab conqueror of the island is discussed below, p. 83.

While the Arabic name for the island, Iqrīṭish, occurs frequently in historical and geographical written sources, for example as early as Balāduri (died 279 H./A.D. 892),<sup>35</sup> this is its first recorded occurrence in epigraphy, whether numismatic or lapidary. Until another better preserved specimen of 'Abd al-'Azīz's dirhem (Class V) is recovered, it must remain uncertain whether the mint name also appears on that issue. The use of the name Iqrīṭish for the mint, rather than the name of the capital, Khandaq, is not surprising. There are many instances in Islamic numismatics of the substitution of the name of the province for the name of the chief city; examples are Adharbayjān, Arrān, Irmīniyah, Ifrīqiyyah, al-Andalus, Sijistān, Ṭabaristān, Fārs, Filastīn, etc.<sup>36</sup>

# CLASS V

'Abd al-'Azīz b. Shu'ayb

Dirhem, 350 H.

## Obverse

لا اله الا  
الله وحده  
لا شريك له  
بن شعيب

## Reverse

الله  
محمد  
رسول الله  
المطيع لله  
عبد العزيز

<sup>35</sup> *Futūḥ al-buldān* (ed. De Goeje), p. 236.

<sup>36</sup> Cf. G. C. Miles, *Excavation Coins from the Persepolis Region* (New York, 1959), p. 55, note 71.

*Margin:* (obscure and many of the letters partly off the flan) بسم الله ضرب هذا الدرهم [بالخندق؟]  
سنة خمسين وثلاثمائة

Area enclosed by linear border.

*Margin:* Qur'ān IX, 33 (partly preserved).

Area enclosed by linear border.

1. Stockholm, Royal Coin Cabinet. Ɱ 16 mm., 0.9 gr. (pierced and clipped). (PLATE IX, 7)

*Provenance:* Sweden, probably Gotland.

This unique dirhem was definitively published by Ulla S. Linder Welin in *NC* 1955, pp. 211–214; and it has been illustrated with a photograph furnished by Mrs. Welin in Miles, “Genealogy,” fig. 5, and in Miles, *D.O. Papers*, 18, fig. 5. The coin was first described by C. J. Tornberg in *Numi Cufici* (Upsala, 1848), p. 268, no. 8, and illustrated there by a line drawing on pl. XIII. Tornberg had not read the date and noted that he had not been able to identify the issuer. Mrs. Welin observed that the coin was found before 1846 and that “nothing is known of its exact provenance beyond the fact that it was part of a Swedish hoard—most probably from Gotland—but, as we know nothing of the other coins in the presumed hoard, no theory can be advanced concerning the route by which this Cretan dirhem reached Scandinavia.” She believed that the name of the mint is present, that the final letter is “more likely” the ق of الخندق, al-Khandaq, rather than the ش of اقريطش, Iqrīṭish (Crete). In 1955, and again in 1958, I examined the coin at first hand in Stockholm and discussed her reading with Mrs. Welin, but I could not persuade myself that any part of the name of the mint is legible. If indeed a mint name was originally present, Iqrīṭish would be more probable, especially in view of its occurrence on the dinar of 343 H. (Class U). The decade of the date is mostly off the flan, but Mrs. Welin convincingly argues that the teeth in

the middle are all vertical and the word therefore must be *خمين* rather than *اربعين*, and also that there is no space for a digit, which could not be present in any case (if 50 is correct) because of the Byzantine reconquest of the island in 350 H.

It is extraordinary that only this one dirhem of the last Arab ruler of Crete has come to light. Mrs. Welin (*NC* 1955, pp. 213–214) proposed two alternative genealogies for ‘Abd al-‘Azīz b. Shu‘ayb: either ‘Abd al-‘Azīz b. Shu‘ayb b. Zerkūn b. Shu‘ayb b. abī-Ḥafṣ ‘Umar, or ‘Abd al-‘Azīz b. Shu‘ayb b. abī-‘Abdullāh (Muḥammad) b. Shu‘ayb b. abī-Ḥafṣ ‘Umar. I have represented these suggested lines of descent in “Genealogy,” p. 68, fig. 6. In my own tentative genealogical table (“Genealogy,” p. 70, fig. 7) I proposed: ‘Abd al-‘Azīz b. Shu‘ayb b. Aḥmad b. ‘Umar (abū-‘Abdullāh) b. Shu‘ayb b. abī-Ḥafṣ ‘Umar. In any case it is obvious that ‘Abd al-‘Azīz was not the son of Shu‘ayb II of the dinars of 271, 275 and 281 H., and that some generations were skipped in the genealogy recorded by al-Nuwairi.

As Mrs. Welin remarked, the absence of any information about other coins, if any, found with this specimen makes it difficult to speculate intelligently on the route by which the coin found its way to Sweden. However, one can at least say that it is improbable that it followed one of the usual routes of Arab dirhems from the east to the Baltic.<sup>37</sup> More likely would be the possibility of some connection with Anemas, the son of ‘Abd al-‘Azīz, who fought on the Byzantine side against the Russian Prince Sviatoslav and was killed in the great battle of Dorystolon (Dristra, Silistria).<sup>38</sup> Anemas, or one of his fellow Cretan Arabs enrolled in the

<sup>37</sup> Cf. Ulla S. Linder Welin, “Arabiska Mynt,” in *Kulturhistorisk Leksikon for nordisk Middelalder*, I (Copenhagen, 1956), cols. 182–191, especially cols. 188–190.

<sup>38</sup> See G. Schlumberger, *L'Épopée Byzantine*, I (Paris, 1896), pp. 135, 143; cf. Schlumberger, *Un Empereur Byzantin au dixième siècle*, 2nd. ed. (Paris, 1923), p. 91.

Byzantine army, might have carried the coin, issued by their last Amir, and lost it to a Russian or Varangian soldier who in turn carried it to Gotland or the Swedish mainland.

## CLASS W

*Anonymous? Iqrīṭish?**Obverse*

لا اله الا ا  
الله محمد ر  
سول الله

*Reverse*

[ضرب؟] هذا [ا]  
الفلس [يا ؟]  
[قريطش ؟]

Single linear border preserved.      Single linear border preserved?

1. Historical Museum, Herakleion. Æ 16 mm. (PLATE IX, 8)  
*Provenance*: Ag. Petros excavations, 1967.

2. Collection of Nikolaos Metaxas, Herakleion. Æ 16 mm.  
(PLATE IX, 9)  
*Provenance*: District of Herakleion.

These two coins are probably, but by no means certainly, specimens of the same issue. The reading of the obverse of no. 2 is doubtless correct; the obverse of no. 1 is very obscure, but it is probably similar to no. 2. The reverse is very problematical. Hardly anything is preserved on no. 1; on no. 2 هذا in the first line and الفلّس in the second may be considered certain, but باقريطش, *bi-Iqrīṭish*, "in Crete," is admittedly a guess. At first I was inclined to read the last line of no. 2 as بن... but there seems to be insufficient room for a first name at the end of the second line, and the formula<sup>1</sup> (if هذا and الفلّس are correct) suggests a mint name rather than the name of an individual.

No. 2 was the first specimen to come to my attention. Mr. Metaxas sent me one set of photographs in August 1966 and another in October 1966. In May 1967 I examined

the coin itself and rephotographed it. No. 1, the specimen from the Ag. Petros excavations (inventory no. C53, found in Trench A2 on June 2, 1967, at a depth of approximately 5.5 meters beneath the surface) is quite hopelessly obscure: it is fragmentary, pierced by corrosion and very few letters are preserved. The reverse being virtually totally effaced, I associate it with no. 1 chiefly on the basis of the probability of the similarity to no. 2 of the unusual obverse type and on the size of the flan.

One can only hope that better preserved specimens of this issue will eventually turn up to confirm or reject the admittedly very dubious reading of the reverse. That the name Iqrīṣh may be present is rendered more likely by its certain presence on the unique dinar of Class U.

# CLASS X

## Unassigned

Obverse	Reverse
لا اله الا	[محمد] د
.....	رسول
.. شريك له	[الله]
[or] ... لك ر (؟) د	.....
Single beaded (?) border preserved.	Single linear (?) border preserved.

1. Collection of Nikolaos Metaxas, Herakleion. Æ. (PLATE IX, 10)

*Provenance:* Khoustoulia, Crete.

A very obscure specimen, photographs of which (numbered 9 and 10) were sent me by the owner on October 14, 1966. The type appears to differ from all others, and although the coin is not necessarily one of the Amirs of Crete it closely resembles them in style and fabric. Khoustoulia (Χουστουλιανά) is a village about four km. southwest of Gortyna.



## CLASS Y

*Unidentifiable*

The following specimens, certainly issues of the Amirs but not assignable to a specific class because of their obscure condition, have been recorded:

1-5. Archaeological Museum, Herakleion. Æ.

*Provenance*: Herakleion.

Five specimens labeled “Ἐκ Τράπεζα” (cf. Class F, nos. 16-17).

6. Historical Museum, Herakleion. Æ 20 mm.

*Provenance*: Ag. Petros excavations, Herakleion.

This totally obliterated specimen (excavation inventory no. C47), recognizable only by its fabric as probably of the Amirs, was found on June 1, 1967 in sifting soil excavated in Trench B on May 29. The depth of the find was approximately the same as that of the other specimen found in Trench B (Class K, no. 31), that is between 4.80 and 5 meters beneath the surface.

7. Historical Museum, Herakleion. Æ 22 mm.

*Provenance*: Ag. Petros excavations, Herakleion.

As with no. 6 no legends are preserved on this specimen (excavation inventory no. C55), but the fabric and possible traces of a double beaded border suggest that it is a coin of the Amirs. It was found on June 2, 1967 in soil excavated on May 31 in Trench A2, associated with sherds identified as probably Arab, at a depth of approximately 5.35-5.50 meters beneath the surface and not far removed from a positively identified coin of the Amirs (excavation inventory no. C54, Class K, no. 32, above).

## PLATES





CLASS A:1-2 CLASS B:3 CLASS C:4

CLASS E:5-6 CLASS F:7-12

## II



1



2



3



4



5



6



7



8



9



10



11



12

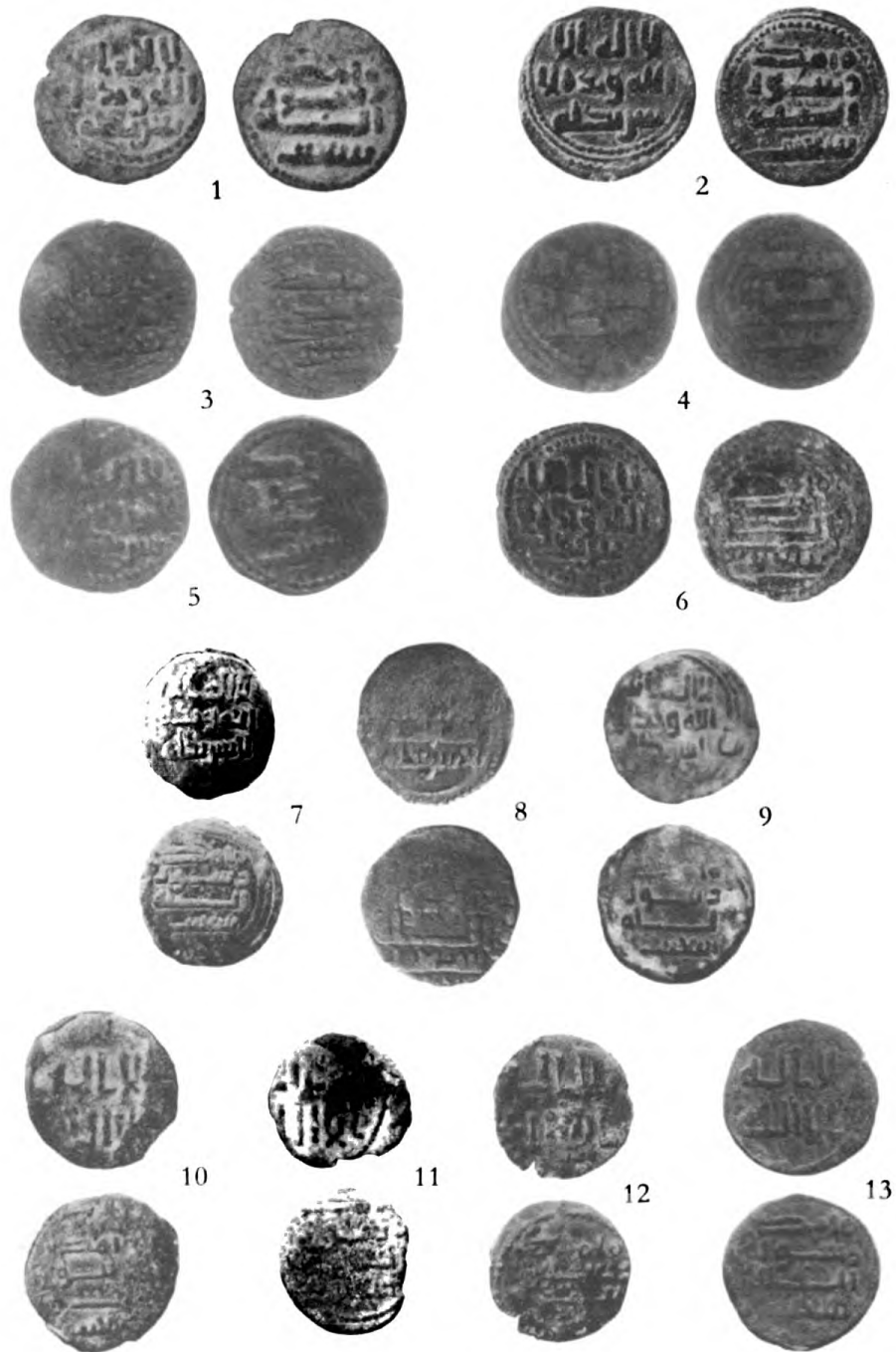
CLASS F:1-12

### III



CLASS F: 1-12

# IV



CLASS F:1-6 CLASS G:7-9

CLASS H:10-13

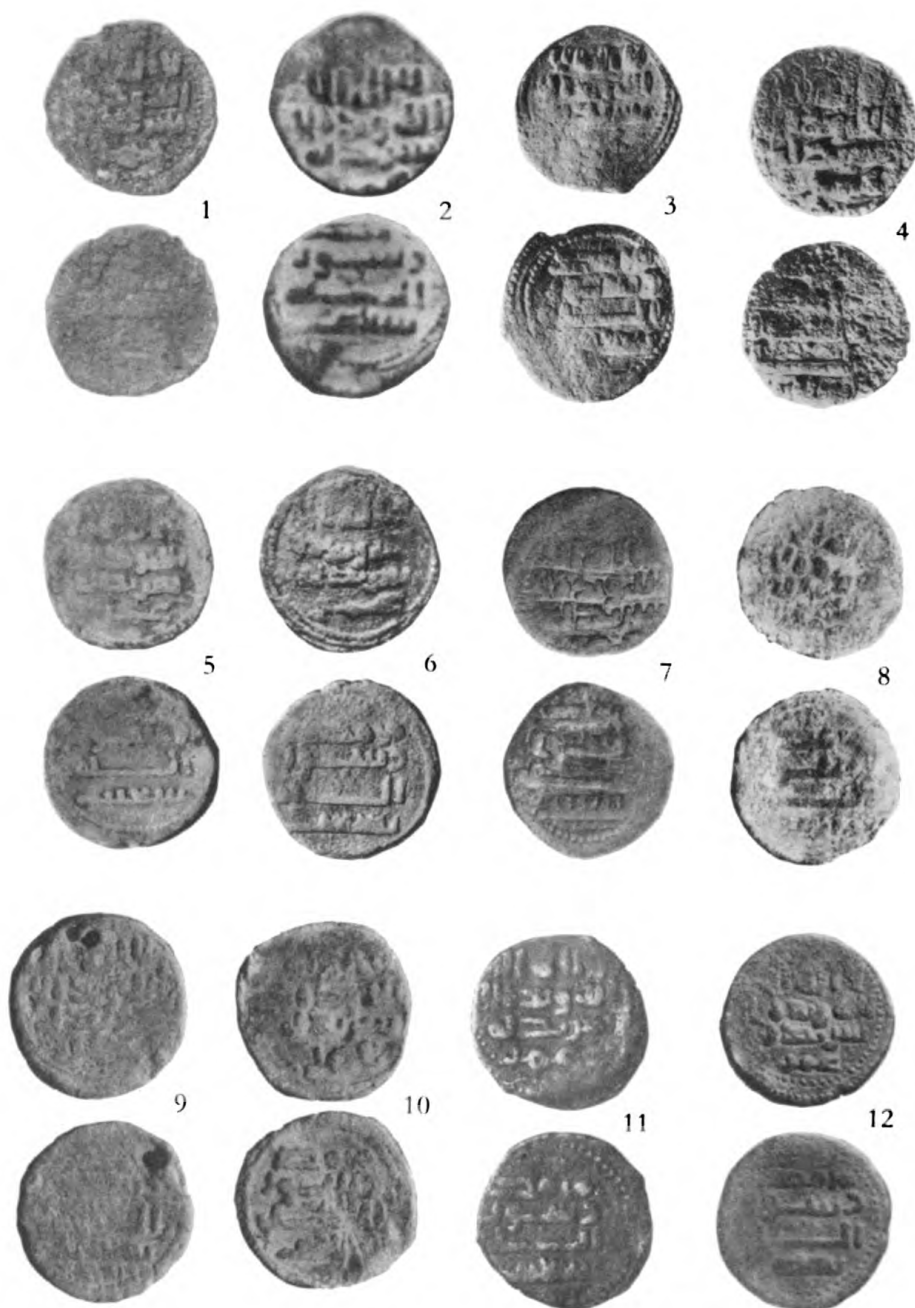


CLASS H:1-2 CLASS I:3-6

CLASS J:7 CLASS K:8-14



# VI



CLASS K: 1-12

# VII



CLASS K:1-4 CLASS L:5-9

CLASS M:10-11

# VIII



1

2



3



4



5

6

7

8

9



10



11



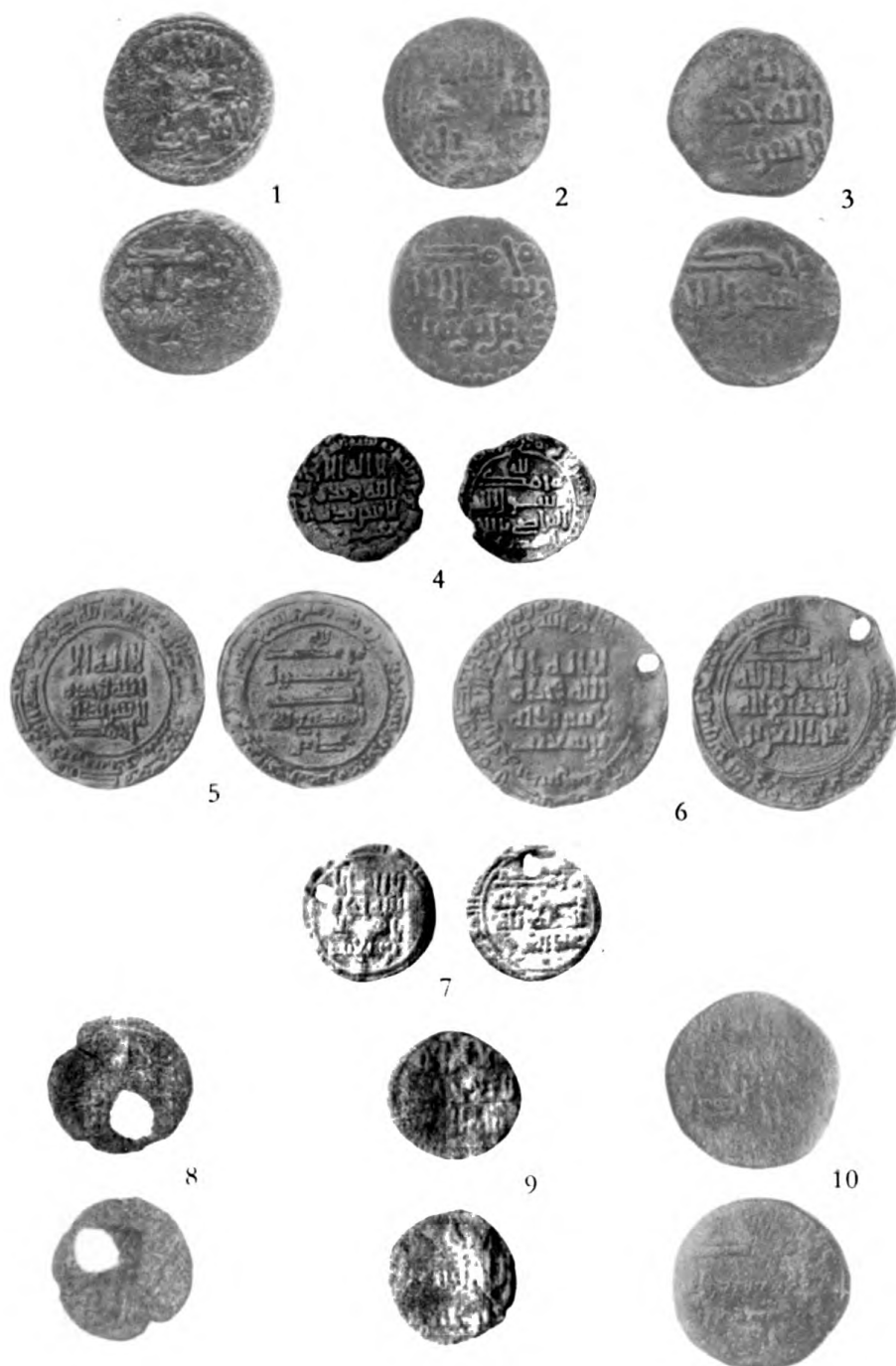
12



CLASS M: 1-2 CLASS N: 3-4

CLASS O: 5-9 CLASS P: 10-12

IX



CLASS Q:1-2 CLASS R:4 CLASS S:5  
 CLASS U:6 CLASS V:7 CLASS W:8-9  
 CLASS X:10



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NUMISMATIC NOTES AND MONOGRAPHS

No. 161

THE WESTERN COINAGES  
OF NERO

By DAVID W. MAC DOWALL

CJ  
35  
.N9  
v. 161



THE AMERICAN NUMISMATIC SOCIETY  
NEW YORK

1979



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# NUMISMATIC NOTES AND MONOGRAPHS

*Number 161*



# The Western Coinages of Nero

By DAVID W. MAC DOWALL



THE AMERICAN NUMISMATIC SOCIETY  
NEW YORK  
1979

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**AT J. J. AUGUSTIN · GLÜCKSTADT**

To the memory of my mother  
**LILIAN MAY MAC DOWALL**  
*b. 1895      d. 1961*







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## PREFACE

The coins of Nero present a bewilderingly rich variety of obverse legends and reverse types. The principal varieties have indeed been described in the celebrated catalogues of Roman Imperial Coins compiled by Eckhel, Cohen, Fiorelli, Sydenham, Mattingly, Miss Robertson and others—each largely based on one of the great numismatic collections. But although considerable progress has been made in listing the varieties, identifying the denominations and distinguishing the mints, the basic pattern of the coinage and its successive chronological stages have largely remained obscure.

This study of the western coinages of Nero seeks to apply to this rich coinage the principles of die study and type analysis. A new corpus has been established of the varieties that can be substantiated from coins in the principal numismatic collections. Whenever possible, examples have been cited from distinct obverse and reverse dies to distinguish the normal varieties of the coinage from the exceptional variants. The evidence of site finds has been used to clarify the attribution of uncertain groups, and this body of evidence has then been analyzed to establish the chronological sequence of successive issues and to reconstruct the administrative subdivisions of the mints.

As in any work of this kind, my obligations are numerous. I am indebted to the Board of Management of the Bryce and Amy Mary Preston Read Scholarship Fund and to the Trustees of the Arnold Historical Essay Fund for generous help which has greatly facilitated the collection of material. My thanks are due to the curators and owners of the numerous collections in Western Europe cited in this work for allowing me to examine and study the coins in their charge, and to the curators of coin cabinets in Scandinavia, Eastern Europe and the United States of America for sending me detailed information and photographs of material in museums that I have not been able to visit. Without their friendly help and cooperation, this project could never have been completed.

Many scholars have generously discussed relevant subjects with me. R. A. G. Carson, J. P. C. Kent, C. M. Kraay, F. A. Lepper, C. H. V. Sutherland and the late Mlle. G. Fabre have kindly allowed me to study a number of their unpublished papers. I am indebted to Sra. de Moya for sending me rubbings of coins in some Spanish collections that I was unable to visit, to H. Jucker for discussing problems of Nero's portraiture and for sending the photographs of the Terme bust of Nero reproduced in PLATES XXIV and XXV, and to Almirall Barril, who has long been interested in the coinages of Nero, for information about the interesting material he has added to his collection over the years. But above all I should like to record my gratitude to the late John Walker, formerly Keeper of Coins in the British Museum, for the facilities which he so freely granted me both before and after I joined the staff of his department, and to C. H. V. Sutherland, Keeper of Coins in the Ashmolean Museum, Oxford, for the constant help which he has given me so generously since I first became his pupil.

Admont,  
Berkhamsted  
7 April 1978

David W. Mac Dowall

## COLLECTIONS CITED

Public collections are listed under the name of the town in which they are to be found, except for those of the American Numismatic Society, British Museum and Hermitage Museum. Private collections are listed under the name of their owner. Where a collection has been offered for public sale reference is given to the printed sale catalogue and the date and place of sale. Private collections known to have dispersed are shown in *Italics*. The abbreviations are those used in the Catalogue section.

For most of the more common varieties it would be possible to quote examples from any of the major collections. The British Museum, Oxford, Paris, Vienna, Vatican and Terme collections are normally cited in preference to others because they were the collections most accessible to me during the early stages of this study. Wherever possible varieties are substantiated from public collections.

Almirall Barril, J., Barcelona.	Al
American Numismatic Society, New York.	ANS
<i>Ars Classica XIII</i> (Sale, Naville, Geneva, 27 Jun. 1928).	AC 13
<i>Ars Classica XV</i> (Sale, Naville, Geneva, 2 Jul. 1930).	AC 15
<i>Ars Classica XVI</i> (Sale, Naville, Geneva, 3 Jul. 1933).	AC 16
<i>Bahrfeldt, M. von</i> (Sale, Reichmann, Halle, 18 Sept. 1922)	Bah
<i>Basel Münzhandlung I</i> (Sale, Cahn, Basel, 28 Jun. 1934).	Bas 1
Beltran, Pio, Valencia.	Bel
<i>Belfort, A. de</i> (Sale, Hoffmann, Paris, 25 Feb. 1888).	Belf
<i>Bement, C. S.</i> (Sale, <i>Ars Classica</i> , Lucerne, 25 Jun. 1924).	Bem
Berlin, Münzkabinett, Staatliche Museen.	Be
Blackburn, Public Library, Museum and Art Gallery.	Bl
Blanco F. F., Madrid.	Bo
British Museum, London.	BM
Budapest, Magyar Nemzeti Museum.	B
<i>Cahn 60</i> (Sale, Cahn, Frankfurt am Main, 2 Jul. 1928).	Cahn 60
Cambridge, Fitzwilliam Museum.	Cam

Cardiff, National Museum of Wales.	Car
<i>Chabenat</i> (Sale, Bourgey, Paris, 27 Nov. 1911).	Cha
Cirencester, Corinium Museum.	Cir
Colchester, The Colchester and Essex Museum.	Col
<i>Conte B. de P.</i> (Sale, Santamaria, Rome, 25 May 1926).	Con
Copenhagen, National Museet.	C
<i>Cuzzi, A.</i> (Sale, Baranowski, Milan, 9 Dec. 1929).	Cuz
<i>De Quelen, Vicomte E.</i> (Sale, Rollin and Feuardent, Paris, 14 May 1888).	De Q
<i>Druot Sale 1921</i> (Paris, 19 May 1921).	Dr 1921
<i>Egger Auctions Katalog XLIII</i> (Sale, Egger, Vienna, 14 Apr. 1913).	Eg 43
<i>Egger Auctions Katalog XLV</i> (Sale, Egger, Vienna, 12 Nov. 1913).	Eg 45
<i>Fairbairn, S.</i> , London.	Fai
<i>Faure, J.</i> (Sale, Bourgey, Paris, 10 Dec. 1923).	Faur
<i>Fitzwilliam</i> , (Sale, Christies, London, 30 May 1949).	Fi
Florence, Museo Archeologico.	F
Frost Collection, Essex, England.	Fr
Glasgow, Hunterian Museum.	G
<i>Glendining and Seaby Auction 2</i> (Sale, London, 15 Jul. 1929).	Glen 2
Gnecchi, F. ( <i>RIN</i> 1905 — now in the Museo Nazionale delle Terme, Rome).	Gn
Gotha, Schlossmuseum.	Got
<i>Gréau, J.</i> (Sale, Hoffmann, Paris, 18 May 1869).	Gr
The Hague, Koninklijk Kabinet van Munten.	H
<i>Hahn, Karl</i> (Sale 61, Cahn, Frankfurt am Main, 3 Dec. 1928).	Hah
<i>Hall, H. P.</i> (Sale, Glendining, London, 16 Nov. 1950).	Hall
<i>Hands, Rev. A. W.</i> (Sale, Ratto, Lugano, 8 Feb. 1928).	Han
<i>Hartwig, P.</i> (Sale, Santamaria, Rome, 7 Mar. 1910).	Har
<i>Helbing 1926</i> (Sale, Helbing, Munich, 12 Oct. 1926).	Hel 1926
<i>Helbing 1929</i> (Sale, Helbing, Munich, 20 Jun. 1929).	Hel 1929
Hermitage Museum, Leningrad.	Her
<i>Hirsch 11</i> (Sale, Hirsch, Munich, 4 May 1904).	Hir 11
<i>Hirsch 12</i> (Sale, Hirsch, Munich, 17 Nov. 1904).	Hir 12

<i>Hirsch</i> 26 (Sale, Hirsch, Munich, 23 May 1910).	Hir 26
<i>Hirsch</i> 34 (Sale, Hirsch, Munich, 5 May 1914).	Hir 34
<i>Hoffmann, H.</i> (quoted by A de Belfort in <i>ASFN</i> 1884, 52 f.).	Hof
<i>Hollschek, K.</i> , Vienna (quoted in <i>NZ</i> 1934 p. 20 ff.).	Holl
<i>Horsky, J.</i> (Sale, Hess, Frankfurt am Main, 30 Apr. 1917).	Hor
<i>Hoskier, H. C.</i> (Sale, Hirsch, Munich, 13 Nov. 1907).	Hos
<i>Imhoof-Blumer, F.</i> (Sale, Hirsch, Munich, XVIII, 27 May 1907).	Im
<i>Krausz, S.</i> (Sale, Cahn, Katalog 54, Frankfurt am Main 9 Sep. 1925).	Kr
<i>Laughlin</i> (Sale, Hess, Lucerne, 18 Dec. 1933).	Lau
<i>Lawrence, L. A.</i> , London (casts in the British Museum).	Law
Leningrad, see Hermitage Museum.	
<i>Levis, H. C.</i> (Sale, Naville, Geneva, 18 Jun. 1925).	Lev
Lisbon, Museu Numismatico Portugues.	L
<i>Löbbecke, A.</i> (Sale, Hess, Frankfurt am Main, 6 Jan. 1926).	Lob
London, see British Museum.	
London, Guildhall Museum.	LG
Lyon, Palais des Arts.	Ly
Mac Dowall, D. W., Berkhamsted.	Mac
Madrid, Museo Arqueológico Nacional.	M
Madrid, Real Academia de la Historia.	MRA
Mainz, Römisch-Germanisches Zentralmuseum.	Mz
Manchester, University Museum.	Man
Mayenne, Musée de la Mayenne.	May
Mazzini, Ing. G., (Monete Imperiali Romani, Catalogue by M. Ratto, Vol. I, Milan, 1957).	Maz
<i>Merzbacher</i> , (quoted by Mattingly and Sydenham <i>RIC</i> I p. 168).	Mer
<i>Messenger, L. G. P.</i> Sale, Glendining, London, 21 Nov. 1951).	Mes
Milan, Castello Sforzesco.	Mil
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## 1. CHRONOLOGICAL FRAMEWORK

### NERO'S TITULATURE

The basic chronological framework for the arrangement of Nero's coinages is provided by the elements of imperial titulature found on the coins. Nero held the consulship five times, in 55, 57, 58, 60 and 68,<sup>1</sup> and his first and fourth consulships are recorded on the gold and silver.<sup>2</sup> Considerably more important are the series of tribunician dates found on the pre-reform aurei and denarii and on a limited number of the later sestertii and dupondii, and the use of "imperator" as a praenomen during the later years of his principate. Unfortunately both the reckoning of Nero's tribunicia potestas, and the date when he assumed the praenomen imperator have been disputed.

### TRIBUNICIA POTESTAS

Nero celebrated the renewal of his tribunician power on 4 December,<sup>3</sup> fifty two days after his *dies imperii* of 13 October.<sup>4</sup> He counted it from 4 December 54, and added one to each TRP number on 4 December in each succeeding year. Apart from this unusual starting date, there is no need to assume any irregular reckoning.

The supposed difficulty in calculating Nero's TRP has been the apparently contradictory entries in two surviving fragments of the Arval Acta. For 3 January 59 Nero's titles are given as TRP V . . .,<sup>5</sup> but both the general heading for 60 and the specific entry for 3 January of that year have TRP VII IMP VII,<sup>6</sup> whereas on a normal reckoning one would expect to find TRP VI IMP VII. This gave rise to Mommsen's view that during 59 Nero changed his TRP renewal day to 10 December (the day of the consilia) and subsequently counted TRP I

<sup>1</sup> A. Degraffi, *I fasti consolari dell'impero romano* (Rome, 1952), pp. 15 ff.

<sup>2</sup> *Cat.* 3, 9 ff., 37, 42 ff.

<sup>3</sup> *Corpus Inscriptionum Latinarum* (hereafter *CIL*) VI, 2039, 2041.

<sup>4</sup> *CIL* VI, 2041.

<sup>5</sup> *CIL* VI, 2041.

<sup>6</sup> *CIL* VI, 2042.

as 15 October to 9 December 54 with TRP II as 10 December 54 to 9 December 55. Nero would thus regard TRP VII as 10 December 59 to 9 December 60.<sup>7</sup> We now know that the Arval Acta commemorated Nero's *dies imperii* on 13 October in 58<sup>4</sup> and the bestowal of his *tribunicia potestas* on 4 December in both 57 and 58<sup>5</sup>—the sole years for which the relevant parts of the Acta survive. Any alterations, therefore, in numbering Nero's TRP cannot have been occasioned by a change in the starting date of the tribunician year. The 4 December was already in use by 57, whereas the discrepancy in the numbering of Nero's TRP does not appear until after the entry for 59.

The other epigraphic and numismatic evidence<sup>8</sup> supports a straightforward reckoning of Nero's TRP from 4 December 54. Most inscriptions merely establish a connection between a particular TRP date and the number of an imperial salutation. Three inscriptions, however, have an additional external date. The military diploma in Vienna granted to Iantumarus<sup>9</sup> is unfortunately indecisive. Although it gives a consular dating AD VI NON IVL CN PEDANIO SALINATORE L VELLEIO PATERCVLO COS besides TRIB POT VII IMP VII COS IIII in Nero's titles, the date of their suffect consulship is uncertain.<sup>10</sup> But the other two inscriptions are more helpful. Lucretianus' dedication from Luna<sup>11</sup> shows Nero as TRIB POTEST VIII IMP VIII and Poppaea as *Poppaea Aug Neronis Caesaris Aug Germ.* Poppaea gave birth to a daughter, Claudia, in 63 and both she and the child

<sup>7</sup> Theodor Mommsen, *Hermes* 2 (1856), p. 56 and *Römisches Staatsrecht* II (3rd ed., Leipzig, 1887), pp. 796 ff. Mommsen has been followed by B. W. Henderson, *Life and Principate of the Emperor Nero* (London, 1903), Appendix C., p. 449; L. Constans, "Les puissances tribuniciennes de Néron," *Comptes-rendus de l'Académie des inscriptions et belles-lettres (CRAI)* 1912, p. 385; E. A. Sydenham, *The Coinage of Nero* (London, 1920), pp. 23–28; and R. Cagnat, *Cours d'épigraphie latine* (4th ed., Paris, 1914), pp. 183 ff. Mommsen's view has been attacked by H. F. Stobbs, *Philologus* 32 (1873), pp. 1–91; H. Dessau, *Geschichte der römischen Kaiserzeit* II (Berlin, 1926), p. 196, note 1 and in notes to inscriptions in *Inscriptiones Latinae Selectae (ILS)*; H. Mattingly, "The Date of the 'Tribunicia Potestas' of Nero and the Coins," *NC* 1919, pp. 199–200 and "'TRIBVNICIA POTESTATE.'" *JRS* 1930, pp. 78–91 and M. Hammond, "The Tribunician Day During the Early Empire," *Memoirs of the American Academy in Rome* 1938, pp. 23–32.

<sup>8</sup> See Table 1, pp. 6–7 below.

<sup>9</sup> *CIL* XVI, 4. (= *ILS* 1987).

<sup>10</sup> Degraffi, *I fasti*, pp. 16–17.

<sup>11</sup> *CIL* XI, 6955.

were given the title of Augusta immediately afterwards.<sup>12</sup> The Luna dedication thus supports the straight calculation which would make TRP VIII December 62/63. On Mommsen's system TRP VIII would have to be December 61/62 which is a year too early. The Boeotian inscription from Acraephia recording Nero's declaration of liberty to Greece<sup>13</sup> and Epameinondas' speech of thanks, has *δημαρχικῆς ἐξουσίας τὸ τρισκαίδεκατον*. Hammond has shown that the assembly took place on 28 November 67,<sup>14</sup> and this again supports the straight calculation which would make TRP XIII December 66/67.

Nero's gold and silver coinage forms a regular series from TRP to TRP X without interruption, and gives no suggestion of any change in tribunician reckoning. The aurei and denarii of 60 have the normal COS IIII TRP VI.<sup>15</sup> This issue seems to be the production of a complete year, and its TRP date directly contradicts the entry in the Arval Acta of COS IIII TRP VII for 3 January of the same year.

In other circumstances one might have allowed the evidence of the Arval Acta, the record of a public college quite closely connected with the Imperial House, against the authority of a dedication from Luna and of an inscription from Boeotia; but the Luna dedication and Acraephia inscription are supported by the clear evidence of the COS IIII TRP VI aurei and denarii from the mint of Rome (see Table I below), an institution far more official and imperial than a public college. As these coins are struck from several distinct dies, this date can hardly be regarded as an error. The only evidence for the so called 'Arval reckoning' is the double entry in the Acta of COS IIII TRP VII for January 60, and a very good case can be made

<sup>12</sup> Tacitus, *Annals* xv.23. On the right hand edge of the stone of this dedication are the remains of the D and N, one above the other, which seem to stand for D(iviae Claudiae ...) N(eronis ...)—and provide an additional argument for dating the inscription to A.D. 63. It is interesting to note that Lucretianus was apparently very careful to record the imperial titlature correctly. His second dedication dated TRP XIII gave Nero the praenomen IMP, whereas his dedication of A.D. 63 did not. The numismatic evidence shows that Nero assumed the praenomen IMP during the course of TRP XII.

<sup>13</sup> *Inscriptiones Graecae* (IG) VII, 2713.

<sup>14</sup> Hammond, "Tribunician Day," p. 28, following M. Holleaux, *BCH* 1888, pp. 510–28 and more fully in his *Discours prononcé par Néron à Corinthe en rendant aux Grecs la liberté*, 1889; and Dittenberger, *IG* VII, 479.

<sup>15</sup> *Cat.* 9, 42.

for regarding these as a mistake. There is in fact a surprisingly large number of minor errors in the Acta of this period, e.g.,

A.D. 57<sup>16</sup>

l. 14. ob tribuniciae (*sic*) potestat. Neronis Claudii...

l. 23/4. immolavit/in sacram viam (*sic*) memoriae Cn....

A.D. 58/9<sup>17</sup>

l. 58. L. Piso L. f. magister (*sic*)

l. 62/3. M. Apronius Saturnius (*sic*—for Saturninus)

A.D. 59/60<sup>18</sup>

a. l. 15. C. Vipstanus (*sic*) Apronianus cos P Memmius (*sic*)

l. 26. August Germanicii (*sic*) Iovi

d. l. 16. Caesari (*sic*) Aug Germanico (to agree with consule).

The imperial titles for 3 January 59, moreover, are given as TRIB POT V IMP VI COS III DESIG IIII;<sup>19</sup> a designation to COS IIII so far ahead as 3 January is most unlikely in view of the constitutional show which Nero's principate was anxious to maintain at this period<sup>20</sup> and it is likely that an entry proper to the closing months alone of the year has been put in full for 3 January. The entry COS IIII TRP VII for 3 January 60 appears to be a closely comparable error. When the Acta for 60 were formally written up at the end of the year, the engraver apparently inserted the current year's date COS IIII TRP VII (December 60/61), for January 60—an error which it would be extremely easy to make by assimilation to the neighboring IMP VII.

#### PRAENOMEN IMPERATOR

The other important chronological indication is Nero's use of IMP as a praenomen<sup>21</sup> from 66. All the known inscriptions dated TRP XII (December 65/66) and later have the praenomen IMP,

<sup>16</sup> *CIL* VI, 2039.

<sup>17</sup> *CIL* VI, 2041.

<sup>18</sup> *CIL* VI, 2042.

<sup>19</sup> *CIL* VI, 2041.

<sup>20</sup> C. H. V. Sutherland, *Coinage in Roman Imperial Policy* (London, 1951), pp. 152 ff.

<sup>21</sup> Later emperors regularly included the praenomen in their titulature from their accession, but this practice did not go back further than Vespasian. Cf. D. McFayden, *History of the Title Imperator under the Roman Empire* (Chicago, 1920).

whereas those dated TRP—TRP XI never have it. The Acta for 66 repeatedly refer to IMP NERO<sup>22</sup> whereas in the proceedings up to and including 60 (the last year before 66 where Nero's titles are recorded) Nero is never given the praenomen. Titinius' dedication at Luna dated TRP XIII IMP XI COS IIII (December 66/67)<sup>23</sup> is to Diva Poppaea and Imp Nero, whereas his earlier dedication in TRP VIII (62/63)<sup>24</sup> repeatedly gives Nero's titles without the praenomen. The Acraephia inscription<sup>25</sup> dated TRP XIII gives Nero the praenomen αὐτοκράτωρ; and the Sardinian milestone dated TRP XIII IMP XI<sup>26</sup> has the praenomen IMP. An apparent exception, the stone from Casino<sup>27</sup> (no longer extant), seems to have been incorrectly transcribed. It is reported without the praenomen and dated TR POT XIII IMP VIII (*sic*). But this is an impossible combination which cannot be accepted, and TR POT VIII IMP VIII, a conjunction known from another inscription,<sup>28</sup> is the obvious emendation.

Sestertii and dupondii with TRP XIII all have the praenominal IMP and so do the rare coins dated TRP XIV. But the praenomen was never used on the aurei and denarii dated TRP—TRP X,<sup>29</sup> nor on the cuirassed bust sestertii.<sup>30</sup> The date on these has been variously read as TR POT XI PPP,<sup>31</sup> TR POT XII PP,<sup>32</sup> TR POT XI PIP,<sup>33</sup> TR POT XI PPI,<sup>34</sup> and TR POT XIII;<sup>35</sup> but all the specimens which the author has examined are struck from the same obverse die with TR POT XI PPP.<sup>36</sup>

<sup>22</sup> *CIL* VI, 2044.

<sup>23</sup> *CIL* XI, 1331.

<sup>24</sup> *CIL* XI, 6955.

<sup>25</sup> *IG* VII, 2713.

<sup>26</sup> *CIL* X, 8014.

<sup>27</sup> *CIL* X, 5171.

<sup>28</sup> *CIL* XI, 1331.

<sup>29</sup> *Cat.* 2–21, 36–53.

<sup>30</sup> *Cat.* 135–36.

<sup>31</sup> L. Laffranchi, "Il predicato P(ROCOS) dei sesterzi di Nerone e la Profectio Augusti," *AttiMemIN* 4 (1921), pp. 47–62.

<sup>32</sup> *BMCRE* I, p. 215, note on no. 111.

<sup>33</sup> *BMCRE* I, no. 112.

<sup>34</sup> *BMCRE* I, no. 111.

<sup>35</sup> Cohen, *Description historique des monnaies frappées sous l'empire romain* (2nd ed., Paris, 1880–92) I. Nero 260 quoting the Wigan collection.

<sup>36</sup> Ingemar König's recent study, "Der Titel «Proconsul» von Augustus bis Traian," *SM* 1971, pp. 42–53 republishes and illustrates six of these sestertii.



The dated and undated coinage, moreover, shows clearly that once adopted, the use of the praenomen remained the regular form. The most mature portraits of Nero, with a thick treatment of the neck and a heavily developed jowl, are always found on coins with the praenomen.

The *terminus post quem* for the assumption of the praenomen is given by the cuirassed bust sestertii dated TRPOTXIPPP and the three inscriptions dated TRPXI. The *terminus ante quem* is fixed by the entries in the Arval Acta for 66, with the caveat, perhaps, that the titulature may have been correct only for the end of the year when the record was completed. Within these limits it is difficult to be more precise. Either the Vinician conspiracy of 66,<sup>37</sup> or the ceremonial reception of Tiridates at Rome during the summer of the same year<sup>38</sup> are equally possible occasions. But although the precise context remains obscure, the praenomen is most important chronologically and enables us to distinguish the later groups in the undated coinages.

TABLE I. Evidence for TRP of Nero

TRP	Aurei	Cat. 2, 3.
	Denarii	Cat. 36, 37.
TRP II	Aurei	Cat. 4.
	Denarii	Cat. 38.
	Inscr.	<i>AE</i> 1897.30 (IMP II COS).
TRP III	Aurei	Cat. 5, 6.
	Denarii	Cat. 39.
	Inscr.	<i>CIL</i> II, 183 (IMP III COS II DES III); II 4734 (IMP III COS II DES III).
TRP IIII	Aurei	Cat. 7.
	Denarii	Cat. 40.
	Inscr.	<i>CIL</i> IX, 4115 (IMP COS III); VII, 12 (IMP IIII COS IIII <i>sic</i> ); XII, 5471 (IMP IIII COS III PP); XII 5473/5; III 346 (IMP V COS III).

<sup>37</sup> McFayden, *Imperator*, pp. 58–59.

<sup>38</sup> Suetonius, *Nero* 13.2.

TRP V	Aurei	Cat. 8.
	Denarii	Cat. 41.
	Inscr.	<i>CIL</i> II, 4657 (IMP II <i>sic</i> ); II 4652 (IMP III <i>sic</i> ); II 4683 (IMP III <i>sic</i> ); VI 2042 (IMP VI).
TRP VI	Aurei	Cat. 9.
	Denarii	Cat. 42.
TRP VII	Aurei	Cat. 10, 11, 12, 13.
	Denarii	Cat. 43, 44, 45, 46.
	Inscr.	<i>CIL</i> XVI, 4 (IMP VII COS III); VI 2042 (IMP VII COS III).
TRP VIII	Aurei	Cat. 14, 15, 16.
	Denarii	Cat. 47, 48, 49.
	Inscr.	<i>CIL</i> III 6123 (IMP VIII COS III PP); II 4888 (IMP VIII COS III). <i>EE</i> VIII p. 365 (COS III IMP VIII PP); <i>AE</i> 1900, 18 (IMP VIII COS III PP).
TRP VIII	Aurei	Cat. 17, 18, 19.
	Denarii	Cat. 50, 51.
	Inscr.	<i>CIL</i> XI, 6955 (IMP VIII COS III).
TRP X	Aurei	Cat. 20, 21.
	Denarii	Cat. 52, 53.
TRP XI	Inscr.	<i>AE</i> 1947, 167 (IMP VIII COS III PP).
	Inscr.	<i>CIL</i> III, 6741/42 (COS III IMP VIII); <i>AE</i> 1919, 22 (IMP COS III PP).
	Sestertii	Cat. 135, 136.
TRP XII	—	
TRP XIII	Sestertii	Cat. 167–74.
	Dupondii	Cat. 238–41.
	Inscr.	<i>CIL</i> X 5171 (IMP VIII <i>sic</i> ); XI 1331 (IMP XI COS III); <i>IG</i> VII 2713.
TRP XIV	Sestertii	Cat. 175, 176.
	Inscr.	<i>CIL</i> X 8014.
TRP XV	—	



## 2. MINTS IN THE WEST

### MINT STRUCTURE UNDER NERO

Some varieties of obverse and reverse legend and type are characteristic of the mints at which the coinage was struck, and the chronological pattern of the issues cannot be determined until the basic mint structure is appreciated. The evidence of finds shows clearly that Rome was the sole mint for the issue of precious metals in the west, but that there were two principal mints, Rome and Lugdunum, for the *aes* coinages.

From these western issues we must be careful to distinguish the coinages struck by a wide range of mints in the eastern provinces. There is little difficulty over the product of city mints which employed Greek legends or of colonies which added to their Latin legends the initial letters of the name of the colony.<sup>1</sup> Rather less obvious are the coins with Latin legends struck by the imperial mints at Caesarea<sup>2</sup> and Antioch<sup>3</sup> and by the military mint in Moesia,<sup>4</sup> but each of these series is characterized by a distinctive range of reverse types.

### THE GOLD AND SILVER MINT

Nero's coinage of aurei and denarii in both the dated and the undated series is remarkably uniform in style, type and content. Coins of the same uniform character seem to have circulated throughout the empire, in Italy, the east and the west. There appears to be no distinctive features of portraiture, legend, lettering or bust truncation that distinguish finds from one part of the empire from those in another. The different forms of obverse legend mark succes-

<sup>1</sup> Sydenham, *Nero*, pp. 132-169.

<sup>2</sup> Sydenham, *The Coinage of Caesarea in Cappadocia* (London, 1933), pp. 36 ff.

<sup>3</sup> W. Wruck, *Die syrische Provinzialprägung von Augustus bis Traian*, (Stuttgart, 1931), pp. 63 ff.

<sup>4</sup> D. W. Mac Dowall, "Two Roman Countermarks of A.D. 68" *NC* 1960, pp. 103-112.

TABLE II. Types of Post-Reform Aurei Represented in Hoards

<i>Cat.</i>	<i>Rome</i> <sup>a</sup>	<i>Pompeii (1812)</i> <sup>b</sup>	<i>Utrecht</i> <sup>c</sup>	<i>Corbrige</i> <sup>d</sup>	<i>Paris (1867)</i> <sup>e</sup>	<i>Italica</i> <sup>f</sup>	<i>Zirkowitz</i> <sup>g</sup>	<i>Mardin</i> <sup>h</sup>	<i>Liberchies</i> <sup>i</sup>	<i>Total</i>	<i>Approx. %</i>
22	4	2	2	1	2	4	2	2	7	26	7.5
23	2	—	4	1	3	3	1	3	1	18	5.2
24	8	1	2	1	—	—	3	10	3	28	8.0
25	22	8	7	5	9	26	10	25	39	151	43.2
26	6	—	1	—	—	—	1	—	1	9	2.6
27	3	1	—	—	—	—	2	2	—	8	2.3
28	9	1	5	1	4	10	9	10	6	55	16.0
29	—	—	1	—	—	1	2	—	2	6	1.7
30	7	5	1	1	1	—	1	9	2	27	7.7
31	1	—	1	—	1	—	—	3	5	11	3.2
32	2	—	—	—	—	1	—	—	1	4	1.2
33	2	—	—	—	—	—	—	3	—	5	1.4
<i>Total</i>	66	18	24	10	20	45	31	67	67	348	

<sup>a</sup> *Bullettino della Commissione Archeologica Comunale di Roma* 56 (1930), pp. 1 ff.

<sup>b</sup> Fiorelli, *Pompeianarum Antiquitatum Historia*. I.3, pp. 250–51.

<sup>c</sup> *Opgravingen op het dompe in te Utrecht, Haarlem* 1934, pp. 49 ff.

<sup>d</sup> *NC* 1912, pp. 265–312.

<sup>e</sup> Fonds Vacquer à la Bibliothèque de la ville de Paris. The late Mlle. Fabre kindly sent me details of this find.

<sup>f</sup> *NZ* vol. 34, pp. 29 ff.

<sup>g</sup> *Mitteilungen C. C. Steiermark* 2, 173; 3, 157; 5, 109.

<sup>h</sup> K. Regling, "Der Schatz römischer Goldmünzen von Diarbekir (Mardin)," *BIM* 1930–33, pp. 353–381.

<sup>i</sup> M. Thirion, *Le trésor de Liberchies. Aurei des Ier et IIe siècles* (Brussels 1972).

TABLE III. Types of Post-Reform Denarii Represented in Hoards

<i>Cat.</i>	<i>Reka-Devnia<sup>a</sup></i>	<i>Falkirk<sup>b</sup></i>	<i>Valeni<sup>c</sup></i>	<i>Fronenberg<sup>d</sup></i>	<i>Total</i>	<i>Approx. %</i>
54	3	1	1	—	5	2.5
55	3	—	—	2	5	2.5
56	—	—	1	—	1	0.5
57	23	7	18	3	51	25.5
58	—	—	—	—	—	—
59	2	2	2	3	9	4.5
60	39	4	12	4	59	29.5
61	6	3	5	1	15	7.5
62	15	4	—	1	20	10.0
63	—	—	—	—	—	—
64	2	2	—	—	4	2.0
65	—	1	4	—	5	2.5
66	—	—	3	2	5	2.5
67	—	—	—	—	—	—
68	4	2	7	—	13	6.5
69	5	1	2	—	8	4.0
<i>Total</i>	102	27	55	16	200	

<sup>a</sup> N. A. Mouchmov, "Le trésor numismatique de Reka-Devnia", *Annuaire du Musée National Bulgare* 1934 Supplément.

<sup>b</sup> NC 1934, pp. 1-30.

<sup>c</sup> MSS. list in British Museum.

<sup>d</sup> ZfN 1912, pp. 189-253.

sive chronological stages and not the differing practices of individual mints. Minor differences in reverse types, such as the placing of the legends SALVS and ROMA across the field instead of in the exergue, are similarly chronological distinctions. There is, moreover, no clear indication of any difference in the relative proportion of aureus and denarius reverse types between finds in Italy and the western or eastern provinces.

This gold and silver coinage forms a remarkably compact group, and the portrait *imagines* used by its die engravers are basically the same as those used for the *aes* of the mint of Rome. The bust truncation of aurei and denarii dated TRP IX and TRP X (PLATE I, 19-20) is very close to that of the Roman *aes* without SC (PLATES V-VI, 177ff.); the truncation of the early undated gold and silver (PLATE I, 22, 23) is close to that on the Roman *aes* with SC struck in 64-66 (PLATE VII, 200, 205); and the truncation of the gold and silver with the praenomen IMP (PLATE II, 31, 65, 66) is very similar to that of Roman *aes* with the praenomen IMP (PLATE IX, 238, 240). None of these has anything in common with the characteristic Lugdunum truncation at any stage (PLATE XIII, 419ff.). The common form of bust truncation seems to have been an external factor derived from common *imagines* used by all the engravers at a mint. The use of common *imagines* shared with the Roman *aes* clearly points to Rome rather than Lugdunum as the place of the gold and silver die engraving establishment.<sup>5</sup>

There is good evidence for the existence of the mint at Rome in the senatorial office of the *tresviri monetales aere argento auro flando feriundo*, which is found on inscriptions down to third century A.D.,<sup>6</sup> and in the series of mint inscriptions from Rome.<sup>7</sup>

Rome would certainly have been the most convenient minting place for gold and silver under Nero. The chief sources for freshly

<sup>5</sup> My argument is not open to the sort of objection that M. Grant makes ("The Mints of Roman Gold and Silver in the Early Principate," *NC* 1955, p. 44) to C. H. V. Sutherland's attribution of Claudius' gold and silver to Rome—"surely we cannot argue that certain gold and silver is of Rome because of a stylistic resemblance to *aes* which we believe to be Roman"—for it merely points to the existence of *imagines* of two distinct types and identifies the type used on the aurei and denarii.

<sup>6</sup> F. Lenormant, *La monnaie dans l'antiquité* III (Paris, 1878), pp. 185 ff.

<sup>7</sup> *CIL* VI, 42, 43, 44, 239, 791, 1145, 1607, etc.

mined gold and silver were the mines in the Iberian peninsula,<sup>8</sup> especially those in northwest Spain which were imperial property<sup>9</sup> at this period. The large revenue from these imperial mines would no doubt usually be turned into precious coin to meet imperial expenditure. The principal items of expenditure would be central state administration, public works and buildings, doles, donatives, the army and provincial government. The financial arrangements, however, did not repeatedly involve the transportation of large sums of money. Each province seems to have had its own provincial treasury and only the surpluses or deficits would be transferred at the end of each accounting period.<sup>10</sup> Apart from the maintenance of the frontier armies, the heaviest recurrent expenses, not counter-balanced by comparable local sources of revenue, must have been those for imperial activities at Rome. These were often costly<sup>11</sup> and Italy alone of the provinces was exempt from direct taxation.<sup>12</sup> Most of the precious metal coins struck from bullion stocks must have been put into circulation at Rome as payments of this kind, even though the coins may have passed through commercial channels almost immediately to various parts of the empire to settle trade accounts for imports to the capital.<sup>13</sup>

It is of course theoretically possible that, even though the gold and silver dies were engraved centrally, and the major part of the precious coinage was struck in Rome, some aurei and denarii may have been struck at branch mints.<sup>14</sup> But there is no clear evidence

<sup>8</sup> Tenney Frank, *An Economic Survey of Ancient Rome* III (Baltimore, 1937), pp. 150ff.

<sup>9</sup> Frank, *Survey* III, pp. 166ff.

<sup>10</sup> Cf. A. H. M. Jones, "The Aerarium and the Fiscus," *JRS* 1950, pp. 22-29. In this discussion I use the generic term "treasury" to cover the activities of both *aerarium* and *fiscus*.

<sup>11</sup> Nero's building operations were extensive (see Platner and Ashby, *A Topographical Dictionary of Ancient Rome* (London, 1929), p. 595; Nero spent heavily on games, donatives, gifts, etc. Suetonius, *Nero*, 10.1; 11; 30; Tacitus, *Annals* 12.58.

<sup>12</sup> Tenney Frank, *An Economic History of Rome* (2nd ed. Baltimore, 1927), p. 491.

<sup>13</sup> The capital had a permanently adverse balance of trade. Cf. Frank, *Survey* V (1940), pp. 281-82.

<sup>14</sup> A suggestion made by Sutherland in a review of H. R. W. Smith, *Problems Historical and Numismatic in the Reign of Augustus* (Berkeley, 1951) in *NC* 1952, p. 145. Cf. M. Grant *NC* 1955, pp. 53-54.



to support such a hypothesis. The Vichy inscription<sup>15</sup> mentioning a soldier of *cohors XVII Lugdunensis ad monetam*, attributed to the time of Claudius or Nero, can quite well refer to the *aes* mint which continued to function at Lugdunum under the Flavians.<sup>16</sup> There is no need to refer it to the continued presence of the gold and silver mint, known to be at Lugdunum in A.D. 18.<sup>17</sup> Nor do finds of ancient dies support the hypothesis of subordinate mints. Only three such finds of dies are known for Nero.<sup>18</sup> One in the Museum at Arlon, found locally, is certainly the product of an ancient forger, as it is a metal mould for casting 44 denarii at a time. The other two, both in the Bibliothèque Nationale, Paris, are obverse dies for aurei or denarii. One was "probably found in France" and the other is "said to have been found in France c. 1816," but both may very well have been used by ancient forgers. Many plated denarii are known for Nero as for all the other early emperors.<sup>19</sup> Most of them are in good style and some have argued that they may have been produced by official mint(s) as a measure of illicit profit for the government.<sup>20</sup> But whatever one's verdict on plated denarii of Claudius and earlier emperors, it is now clear that Nero's plated silver was the product of unofficial forgers. The analysis of Nero's coinages has closely defined the issues of denarii and the obverse and reverse types used in each issue. Had the plated denarii been produced under official auspices they would undoubtedly have been made in the same mint organization with the same combinations of types as the regular

<sup>15</sup> *CIL* XIII, 1499, and Mommsen, *Hermes* 16 (1881), p. 645.

<sup>16</sup> *BMCRE* II, p. lviii f. for Vespasian's *aes* mint at Lugdunum.

<sup>17</sup> Strabo 4.3.2. C 192.

<sup>18</sup> C. C. Vermeule, *Some Notes on Ancient Dies and Coining Methods* (London, 1954), pp. 29-30.

<sup>19</sup> For plated denarii of Nero see pp. 35 and 243 below.

<sup>20</sup> L. A. Lawrence, "On Roman Plated Coins," *NC* 1940, p. 194, believed that we should regard plated coins as part of the governmental issues, and so apparently does Sutherland, *Coinage in Roman Imperial Policy*, p. 201; but Mattingly *BMCRE* I, p. xlv f., is doubtful about their official origin. Sydenham, "On Roman Plated Coins," *NC* 1940, pp. 200 ff., thought the St. Swithin's Lane hoard was the product of a forger but that plated denarii were also produced by the mint. But M. H. Crawford's article "Plated Coins—False Coins," *NC* 1968, pp. 55-59, argues convincingly against this, and shows that except in irregular coinages produced in periods of civil war, plated coins must have been forgeries.

denarii in good silver. But whereas hybrids between issues do not occur on good denarii, they are comparatively common within the plated group, combining not only the obverse and reverse types of different issues, but sometimes even obverse and reverse types of different emperors. Whether the dies for these plated denarii were illegally appropriated from an official mint, or whether they were the work of competent private engravers,<sup>21</sup> there can be little doubt that the manufacture of plated denarii was the work of forgers. The places at which finds of early imperial dies have been discovered are singularly out of the way.<sup>22</sup> None has been found in Rome or Lyons, the two known mint cities of the early empire. Nor have any been found in other places where one would expect there to be branch mints (if such were the organization)—towns such as Trier, Arles, Amiens, London—the central location of which commended them as mint cities in the widely changed conditions of the late empire. There is nothing to show that the coins struck from these dies were made under official auspices in the localities where the dies were discovered. In only one case has it been shown that an impeccable coin was struck from one of these dies,<sup>23</sup> but even this die may well have fallen into the hands of forgers by appropriation from the mint after it had been used to strike official coins. And it seems most likely that the dies recovered from these scattered find spots were the property of ancient forgers.

#### DISTRIBUTION OF NERO'S *AES*

The western *aes* of Nero falls into two basic types.<sup>24</sup> The first is characterized by a small globe at the point of Nero's bust on the obverse, and a characteristic M form of bust truncation (see PLATES XIII, 432; XIV, 452). The style of portraiture of this group is quite distinctive and the varieties of obverse legend and reverse

<sup>21</sup> Crawford, "Plated Coins," pp. 56–57, shows that a plated Republican denarius in Hannover was struck from dies, mechanically copied from a pure silver coin.

<sup>22</sup> Vermeule, *Ancient Dies*, pp. 29–30.

<sup>23</sup> *RN* 1946, "Procès Verbaux," pp. ii–viii, though of course others too may have been "official" dies.

<sup>24</sup> *BMCRE* I, p. clxiii f.

types, established by an analysis of well preserved coins with the globe (see Cat. 401–633), constitute an objective basis for attribution to this group even when the globe and form of bust truncation are not visible on worn or corroded coins.

The second type has no globe and a straighter form of bust termination (see PLATE II, 71, 74). The style of portraiture is again distinct, and the analysis of well preserved coins enables us to establish the distinctive forms of obverse legends and reverse types that characterize this group (see Cat. 70–335).

The distribution of these two types in the years immediately after their issue is the basic evidence for the localization of the mints at which the two types were struck. It is not however sufficient merely to list the localities at which examples of each type are said to have been found, as this can sometimes obscure the original pattern of distribution. Single coins may have been lost at any time during the period of their continued circulation; and unusual types are liable to attract attention because they are unusual, whereas the ordinary pass unnoticed. It is therefore important to distinguish the quality of different categories of evidence, and to determine the general character of circulation in an area from the recurrent statistical pattern observed at a number of localities.

The best evidence consists of finds which accurately reflect currency circulating at a known point of time, because they can be given a secure *terminus ante quem*.<sup>25</sup> But there are comparatively few commercial hoards and stratified or closed sites which meet these rigorous canons. The next best evidence consists of the accumulated finds from a thoroughly excavated site, or the accumulated deposits recovered from a well or river bed. Such coins may have been lost at any time during their continued circulation, but it is a reasonable inference that the commonest types will have been most commonly lost; and where the finds from a site are sufficiently numerous, they should provide a reasonably accurate statistical pattern of circulation.

For regions where this quality of evidence is not available, some idea of distribution may be found by noting casual finds recorded in

<sup>25</sup> Cf. J. G. Milne, "The Interpretation of Coin-finds" *Finds of Greek Coins in the British Isles* (London, 1948), pp. 15–16; cf. also *Greek and Roman Coins and the Study of History* (London, 1939), pp. 95–96.

archaeological publications or noted in local museums. The cumulative totals of such finds may be less reliable statistically, if there has been any preference in acquiring or noting specimens of new and rare varieties or in declining badly preserved specimens of common types. Finally, in the absence of other evidence, it is often possible to form an approximate estimate of circulation from the unprovenanced collections of local museums. The general character of some collections suggests quite strongly that it is largely composed of local finds even though the museum has not kept accurate records, but such evidence must be used with great care.

So that appropriate weight can be given to each category of evidence, finds in the following paragraphs have been classified as:

- A—A hoard or excavation finds with *terminus ante quem* of A.D. 80 or before.
- B—The aggregate of coins from other excavations or deposits.
- C—Casual finds.
- D—Unprovenanced coins probably found locally.

For localities where there is adequate evidence from finds classified A and B, finds of other categories which cannot contribute anything further to the picture of distribution have not been cited. Where it is necessary to cite casual finds, the evidence of groups of coins which have greater statistical validity has been preferred to that of single finds.

Finds of sestertii, dupondii and asses in Britain, Upper and Lower Germany, Belgica, Lugdunensis and Raetia are almost all of the "globe" type; finds from Narbonensis are predominantly of the "globe" type; finds from Spain, Noricum, Pannonia and the area east of the Rhine and north of the Danube are divided between the "globe" and the "non-globe" type; and finds from Italy are almost all of the "non-globe" type. In the following list, coins are attributed to the "globe" and "non-globe" mint on the basis of the criteria set out in this monograph. By analyzing the varieties of coins in good condition it is possible to establish those forms of obverse legend and reverse type found exclusively at the "globe" mint, those found exclusively at the "non-globe" mint and those which occur at both mints. These criteria enable us to attribute many find coins to the

appropriate mint, even when globe, aegis or bust truncation may not be visible.

This section is intended merely to indicate the pattern of circulation for each locality—not to constitute an exhaustive list of finds. It would be possible to add further entries for many localities, but they could hardly affect very significantly the overall picture.

		GLOBE TYPE			NON-GLOBE TYPE		
		Sest.	Dup.	As	Sest.	Dup.	As
BRITANNIA							
A	Southwark hoard <sup>26</sup>	—	2	9	—	—	—
B	Richborough exc. <sup>27</sup>	—	5	71	—	2	—
B	Silchester exc. <sup>28</sup>	—	2	9	—	—	—
B	Wroxeter exc. <sup>29</sup>	—	2	8	—	1	1
B	Leicester exc. <sup>30</sup>	—	2	9	—	—	—
B	St. Albans exc. <sup>31</sup>	1	2	12	—	—	—
B	R. Thames deposit. <sup>32</sup>	2	5	9	—	—	—
B	R. Churn deposit <sup>33</sup>	—	2	4	—	—	—
B	R. Walbrook, London <sup>34</sup>	1	3	8	—	—	—
GERMANIA INFERIOR							
B	Nijmegen <sup>35</sup>	9	11	13	1	—	1
B	Neuß exc. <sup>36</sup>	15	17	37	—	2	1
B	Ziegeleien bei Neuß <sup>37</sup>	1	2	1	1	—	—

<sup>26</sup> NC 1903, pp. 99–102.

<sup>27</sup> Totals from *Reports of the Research Committee of the Society of Antiquaries of London*, Nos. 6, 7, 10 and 16.

<sup>28</sup> Now in Reading Museum.

<sup>29</sup> Now in Rowley's House Museum, Shrewsbury.

<sup>30</sup> *Rep ResCommSocAntLond*, no. 15.

<sup>31</sup> *Rep ResCommSocAntLond*, no. 11.

<sup>32</sup> NC 1841–42, pp. 147–168. The figures are for those coins now in the British Museum.

<sup>33</sup> NC 1864, pp. 216–23.

<sup>34</sup> *AntJ* 1962, pp. 40–41.

<sup>35</sup> Local finds in Rijksmuseum G. M. Kam, Nijmegen.

<sup>36</sup> *BonnerJb* 1904, pp. 263–67, and now republished by H. Chantraine in *Novaesium III Die antiken Fundmünzen der Ausgrabungen in Neuss* (Berlin, 1968).

<sup>37</sup> *BonnerJb* 1904, p. 450.

		GLOBE TYPE			NON-GLOBE TYPE		
		Sest.	Dup.	As	Sest.	Dup.	As
B	Bonn exc. <sup>38</sup>	2	3	3	—	—	—
B	Vetera exc. <sup>39</sup>	9	8	10	—	—	—
GERMANIA SUPERIOR							
B	Mainz exc. <sup>40</sup>	—	2	7	—	—	—
B	Vindonissa exc. <sup>41</sup>	9	22	103	1	4	10
C	Marburg bei Pommern <sup>42</sup>	—	2	8	—	—	—
BELGICA							
B	R. Sambre deposit <sup>43</sup>	—	—	3	—	—	—
B	Condé-sur-Aisne <sup>44</sup>	—	77	656	—	9	199
C	Compiègne <sup>45</sup>	—	—	13	—	—	2
C	Besançon <sup>46</sup>	—	—	15	—	—	4
C	Franche Comté <sup>47</sup>	—	—	7	—	—	2
C	Héraple <sup>48</sup>	—	—	4	—	—	2
C	Sarrebouurg <sup>49</sup>	—	—	4	—	—	—
C	Langres <sup>50</sup>	—	—	4	—	—	—
LUGDUNENSIS							
A	Sens hoard <sup>51</sup>	—	—	3	—	1	1
A	Augers en Brie <sup>52</sup>	—	1	6	—	—	—

<sup>38</sup> Information from Wilhelmina Hagen.

<sup>39</sup> Information from Wilhelmina Hagen.

<sup>40</sup> *MainzerZ* 1911, pp. 71-72; 1912, p. 84; 1913-14, p. 66; 1918, p. 25; 1929, pp. 66f.

<sup>41</sup> C. M. Kraay, *Die Münzfunde von Vindonissa* (Basel, 1962).

<sup>42</sup> *BonnerJb* 1897, pp. 89-91.

<sup>43</sup> *RBN* 1956, pp. 55-80.

<sup>44</sup> *RN* 1969, pp. 76-130.

<sup>45</sup> St. Germain-en-Laye Musée.

<sup>46</sup> Musée de Besançon. I am indebted to Lucien Lerat and Yves Jeannin for giving me detailed information about the coins in the Besançon Museum and their provenances.

<sup>47</sup> Musée de Besançon.

<sup>48</sup> *Jahrbuch der Gesellschaft für lothringische Geschichte* 1894, p. 322.

<sup>49</sup> *JbGeslothGesch* 1899, p. 326.

<sup>50</sup> Musée de Besançon.

<sup>51</sup> *Bulletin de la Société Archéologique de Sens* 21 (1905), pp. 235-49.

<sup>52</sup> *NC* 1967, pp. 43-46.

		GLOBE TYPE			NON-GLOBE TYPE		
		Sest.	Dup.	As	Sest.	Dup.	As
B	R. Mayenne <sup>53</sup>	3	97	707	—	10	111
C	Rouen <sup>54</sup>	—	—	3	—	—	—
C	Forêt de la Lande <sup>55</sup>	—	—	6	—	—	2
D	Lyons <sup>56</sup>	—	—	2	—	—	—
AQUITANIA							
A	Puy de Dôme hoard <sup>57</sup>	—	—	45	—	—	6
C	Bard (Auvergne) <sup>58</sup>	—	—	1	—	—	—
D	Saintes <sup>59</sup>	—	—	7	—	—	4
D	Poitiers <sup>60</sup>	—	—	17	—	—	3
NARBONENSIS							
B	Orange <sup>61</sup>	—	—	2	—	—	1
C	Vaison <sup>62</sup>	—	—	3	—	—	2
C	St. Remy <sup>63</sup>	—	—	5	—	—	—
C	Basses Alpes <sup>64</sup>	—	—	4	—	—	—
D	Vienne <sup>65</sup>	2	3	9	4	—	3
D	Nîmes <sup>66</sup>	10	3	27	7	4	11

<sup>53</sup> *Bulletin de la Société d'Archéologie, Sciences, Arts et Belles-lettres de la Mayenne*, 1865, pp. 9ff, 32–36. Through the kindness of M. Bisson I have been allowed to study the unpublished part of this large deposit.

<sup>54</sup> Musée Départemental, Rouen.

<sup>55</sup> Musée Départemental, Rouen.

<sup>56</sup> Seen by M. Grant in trade, cf. *NC* 1955, pp. 21–37.

<sup>57</sup> Cf. P. F. Fournier "Les travaux de 1956 au sommet du Puy de Dôme," *Bulletin Historique et Scientifique de l'Auvergne* 1956, pp. 196–201. Through the kindness of the late Mlle Fabre of the Bibliothèque Nationale, I have been permitted to examine this hoard, which has now been published by J. B. Giard, *RN* 1964, pp. 151–57.

<sup>58</sup> P. F. Fournier, *Bulletin Historique et Scientifique de l'Auvergne* 1939, p. 3.

<sup>59</sup> Hôtel de Ville, Saintes.

<sup>60</sup> Le Musée, Poitiers.

<sup>61</sup> Orange Musée from excavations in the theatre.

<sup>62</sup> J. Sautel, *Vaison dans l'antiquité* II (Avignon, 1926), pp. 78–79.

<sup>63</sup> St. Remy-en-Provence Musée from Glanum, and H. Rolland, *Fouilles de Glanum*.—*Gallia* Suppl. 1 (Paris, 1946), p. 23.

<sup>64</sup> Musée des Antiquités Nationale, St. Germain-en-Laye.

<sup>65</sup> Vienne Musée.

<sup>66</sup> Formerly in Maison Carrée, Nîmes.

			GLOBE TYPE			NON-GLOBE TYPE		
			Sest.	Dup.	As	Sest.	Dup.	As
D	Toulon <sup>67</sup>		—	—	3	—	—	3
D	Valence <sup>68</sup>		—	—	4	—	—	1
RAETIA								
C	Augsburg <sup>69</sup>		—	—	15	—	—	5
C	Augsburg <sup>70</sup>		1	2	5	—	—	3
C	Kempten <sup>71</sup>		2	3	6	1	—	4
C	Mertingen <sup>72</sup>		—	—	5	—	—	—
C	Aislingen <sup>73</sup>		—	2	1	—	—	1
C	Burghöfe <sup>74</sup>		1	—	4	—	—	—
C	Bregenz <sup>75</sup>		—	—	2	—	—	—
NORICUM								
C	Virunum <sup>76</sup>		—	—	1	—	—	—
C	Maria Saal <sup>77</sup>		—	—	1	—	—	—
C	Frauenberg bei Leibnitz <sup>78</sup>		—	—	1	—	—	—
C	Wagna <sup>79</sup>		—	1	1	—	—	4
D	Enns <sup>80</sup>		1	1	1	3	—	1
PANNONIA								
B	Carnuntum <sup>81</sup>		1	3	2	1	—	4
B	Carnuntum <sup>82</sup>		—	2	1	—	—	1

<sup>67</sup> Seen by M. Grant in trade, Toulon.

<sup>68</sup> La Bibliothèque, Valence.

<sup>69</sup> Münzkabinett, Munich.

<sup>70</sup> *Die Fundmünzen der Römischen Zeit in Deutschland* 1962 (FMRD) I.7. Schwaben 7001.

<sup>71</sup> FMRD I.7. Schwaben 7182.

<sup>72</sup> H.-J. Kellner, *Die römischen Fundmünzen auf dem nördlichen Teil von Rätien*.

<sup>73</sup> FMRD I.7. Schwaben 7044.

<sup>74</sup> FMRD I.7. Schwaben 7069.

<sup>75</sup> Vorarlberger Landesmuseum, Bregenz.

<sup>76</sup> Landesmuseum für Kärnten, Klagenfurt.

<sup>77</sup> *Fundberichte aus Österreich* II, p. 296.

<sup>78</sup> F. Pichler, *Repertorium der steierischen Münzkunde* II (Graz, 1867), p. 12.

<sup>79</sup> Pichler, *Repertorium* II, pp. 12, 14-15.

<sup>80</sup> Museum Lauriacum, Enns.

<sup>81</sup> Museum Carnuntinum, Bad Deutsch Altenberg.

<sup>82</sup> Sammlung Ludwigsdorff.



			GLOBE TYPE			NON-GLOBE TYPE		
			Sest.	Dup.	As	Sest.	Dup.	As
C	Celje <sup>83</sup>		—	I	—	—	I	—
C	Zagreb <sup>84</sup>		4	I	2	4	2	4
C	Ptuj <sup>85</sup>		2	I	I	—	—	I
TARRACONENSIS								
C	Tarragona <sup>86</sup>		—	I	—	—	—	—
C	Lezuza <sup>87</sup>		I	—	—	—	—	—
C	Zaragoza <sup>88</sup>		3	2	2	—	—	I
C	Menorca <sup>89</sup>		I	—	—	—	—	—
C	Segorbe <sup>90</sup>		—	—	—	—	—	I
C	San Sebastian Prov. <sup>91</sup>		—	I	I	—	I	I
C	Valencia <sup>92</sup>		—	—	—	—	2	2
C	Pollensa <sup>93</sup>		—	—	—	—	—	I
D	Tarragona <sup>94</sup>		3	3	6	I	—	3
D	Madrid <sup>95</sup>		96	47	55	89	40	91
LUSITANIA								
B	Merida <sup>96</sup>		I	2	—	—	—	—
C	Merida <sup>97</sup>		I	—	—	—	—	—
D	Lisbon <sup>98</sup>		8	4	4	5	I	9

<sup>83</sup> Pichler, *Repertorium* II, pp. 13–14.

<sup>84</sup> Šime Ljubić, *Popis Arheološkoga Odjela Nar. Zem. Muzeja u Zagrebu*, pp. 132 ff.

<sup>85</sup> Pichler, *Repertorium* II, pp. 12–15.

<sup>86</sup> 1925/30 excavations in Forum, now in Museo Arqueológico, Tarragona.

<sup>87</sup> *Bolletino Arqueológico del Sudeste Español* 2 (1945), p. 204.

<sup>88</sup> Museo Arqueológico, Zaragoza.

<sup>89</sup> Felipe Mateu y Llopis, "Hallazgos Monetarios XII," No. 752, *NumHisp* 1955, pp. 130–31.

<sup>90</sup> Mateu y Llopis, "Hallazgos Monetarios XII," No. 794, *NumHisp* 1955, p. 137.

<sup>91</sup> Private coll., Santander.

<sup>92</sup> Private coll., Santander.

<sup>93</sup> Mateu y Llopis, "Hallazgos Monetarios VII," No. 600, *NumHisp* 1952, pp. 253–54.

<sup>94</sup> Museo Arqueológico Provincial, Tarragona.

<sup>95</sup> Museo Arqueológico Nacional, Madrid.

<sup>96</sup> Museo Arqueológico, Merida.

<sup>97</sup> Now in Museo Arqueológico, Cordoba.

<sup>98</sup> Casa da Moeda, Lisbon.

		GLOBE TYPE			NON-GLOBE TYPE		
		Sest.	Dup.	As	Sest.	Dup.	As
D	Porto <sup>99</sup>	2	I	—	—	—	7
D	Porto <sup>100</sup>	I	—	2	I	—	II
GERMANIA ( <i>East of Rhine and North of Danube</i> )							
B	Hofheim <sup>101</sup>	—	I	2	—	—	I
B	Saalburg <sup>102</sup>	—	I	2	—	—	—
C	Rheinbrohl <sup>103</sup>	—	—	I	—	—	I
C	Wiesbaden <sup>104</sup>	2	5	6	I	—	—
C	Hedderheim <sup>105</sup>	—	I	4	—	—	3
C	Huffingen <sup>106</sup>	—	2	8	—	—	—
C	Waldkirch <sup>107</sup>	—	—	I	—	—	I
B	Ems <sup>108</sup>	—	—	2	—	—	—
C	Kastell Zugmantel <sup>109</sup>	—	—	I	—	I	—
B	Kastell Obernburg <sup>110</sup>	—	—	I	—	—	2
C	Riegel <sup>111</sup>	—	4	—	I	—	—
ITALIA							
A	N. Italian hoard <sup>112</sup>	—	—	—	5	—	—
A	Pozzarello hoard <sup>113</sup>	—	—	3	17	9	74

<sup>99</sup> Museu Nacional de Soares dos Reis, Porto.

<sup>100</sup> Private coll., Porto.

<sup>101</sup> *Annalen des Vereins für Nassauische Altertumskunde* 34 (1904), p. 27.

<sup>102</sup> L. Jacoby, *Das Römerkastell Saalburg bei Homburg*, pp. 365 ff.

<sup>103</sup> Information from Wilhelmina Hagen.

<sup>104</sup> *AnnVerNassauAltertumskunde* 26 (1896) and 37 (1907), pp. 4 ff.

<sup>105</sup> *Mitteilungen über römische Funde in Hedderheim* 3 (Frankfurt am Main, 1900), pp. 10–61 and 4 (1907), p. 54.

<sup>106</sup> P. Revellio, "Das Kastell Hüfingen," *Der Obergermanisch-Rätische Limes* 55 (Berlin/Leipzig, 1937), pp. 33–34.

<sup>107</sup> K. Bissinger, *Funde römischer Münzen im Großherzogtum Baden* 1 (Donau-eschingen, 1887), p. 14, 35.

<sup>108</sup> R. Bodewig, "Das Kastell Ems," *Der Obergermanisch-Rätische Limes* 36 (1937), p. 22.

<sup>109</sup> L. Jacoby, "Das Kastell Zugmantel," *Der Obergermanisch-Rätische Limes* 32 (Heidelberg, 1909).

<sup>110</sup> A. D. Conrady, "Das Kastell Obernburg," *Der Obergermanisch-Rätische Limes* 18 (Heidelberg, 1903).

<sup>111</sup> Bissinger, *Baden*, pp. 15–16 and (2nd ed. Karlsruhe, 1906), 98, p. 9.

<sup>112</sup> Seen in trade by the author.

<sup>113</sup> *Mélanges d'archéologie et d'histoire* 1964, pp. 51–90.

			GLOBE TYPE			NON-GLOBE TYPE		
			<i>Sest.</i>	<i>Dup.</i>	<i>As</i>	<i>Sest.</i>	<i>Dup.</i>	<i>As</i>
A	Pompeii <sup>114</sup>		—	—	3	14	6	46
A	Pompeii <sup>115</sup>		—	—	3	—	—	178
A	Pompeii <sup>116</sup>		—	—	—	68	2	—
B	Tiber <sup>117</sup>		2	—	11	21	3	218
B	Ostia <sup>118</sup>		—	—	—	—	—	6
B	Minturnae <sup>119</sup>		—	—	—	1	1	1
C	Rome <sup>120</sup>		—	—	1	—	—	23
B	Aquileia <sup>121</sup>		7	7	10	5	4	20
B	Liri <sup>122</sup>		—	1	—	43	3	20

## SOURCES OF METALS AND MINERALS

Nero's *aes* consisted of asses, semisses and quadrantes in copper, and of sestertii and dupondii in orichalcum, with a limited issue of asses, semisses and quadrantes also in orichalcum. Orichalcum was originally a natural alloy, but by the middle of the first century A.D. the Romans made the alloy artificially by heating copper in a bed of calamine. The raw materials needed for the *aes* coinages were thus ordinary copper, copper suitable for processing into orichalcum, and calamine needed for the processing.

The principal sources for copper in the middle of the first century A.D. were the imperial mines in Spain and Cyprus.<sup>123</sup> In

<sup>114</sup> Pompeii Antiquarium.

<sup>115</sup> *RIN* 1897, p. 272.

<sup>116</sup> From a group of coins in the Museo Nazionale, Naples.

<sup>117</sup> Now in Museo Nazionale delle Terme, Rome.

<sup>118</sup> Ostia Museum.

<sup>119</sup> J. Johnson, *Excavations at Minturnae* 1 (Philadelphia, 1935), p. 99.

<sup>120</sup> Museo Capitolino, Rome, believed to have been found in the city.

<sup>121</sup> Museo Archeologico, Aquileia.

<sup>122</sup> *NC* 1970, pp. 96–97 and *NC* 1974, pp. 42–52.

<sup>123</sup> O. Davies, *Roman Mines in Europe* (Oxford, 1935), p. 60; and R. J. Forbes, *Metallurgy in Antiquity* (Leiden, 1950), pp. 272 ff. The ancients do not generally seem to have realized the metallic qualities of zinc, and apparently regarded the process as one which purified and strengthened the metal: cf. Davies *Mines*, Isidore, *Etym.* 16. 20.3. A detailed explanation of the manufacture of orichalcum in Roman times is given in Earle R. Caley, *Orichalcum and Related Ancient Alloys*, *ANSNM* 151 (New York, 1964), pp. 92 ff.

Spain the mines of Sextus Marius had been confiscated by Tiberius;<sup>124</sup> and the Hadrianic letter to Ulpian Aelianus,<sup>125</sup> read in conjunction with the Lex Metallum Vipascensis<sup>126</sup> shows clearly that the copper, silver and iron mines in established mining districts of Spain were state owned at that period; and its reference to a *forma* revised by Hadrian shows that the original of this *lex* must have been of earlier date. In Cyprus the mines seem to have been nationalized when the tribune Clodius annexed the island in 58 B.C.;<sup>127</sup> Augustus gave Herod a concession but retained a half interest for the Roman government;<sup>128</sup> and the mines near Soli were still under state ownership when Galen visited them in the second century A.D.<sup>129</sup>

Spanish copper, called "Marianum" or "Cordubense," was especially important for the coinage, as it readily absorbed calamine and reproduced the excellence of orichalcum in making sestertii and dupondii.<sup>130</sup> The extensive copper workings in Cyprus were apparently less highly valued once better copper (and orichalcum) had been found in other countries, but Pliny explicitly tells us that Cypriot copper was used for the production of asses.<sup>131</sup>

There do not seem to have been any other important copper workings in the Roman Empire at this period. The copper from Livia's mine in Gaul had enjoyed a high reputation but the supply soon gave out;<sup>132</sup> Sallustius' copper from Haute-Savoie was highly esteemed "next to orichalcum," but supplies only lasted for a short time;<sup>133</sup> and although there were also Roman copper mines near Lyons the evidence for their working is of third century date.<sup>134</sup>

<sup>124</sup> Davies, *Mines*, pp. 94 ff.

<sup>125</sup> Tacitus, *Annals* vi, 19.

<sup>126</sup> C. G. Bruns, *Fontes iuris romani antiqui* (7th rev. ed. Tübingen, 1909), pp. 289-93. See also discussion of these documents in Frank, *Survey* III, pp. 167-74.

<sup>127</sup> Dio 38.30.5.

<sup>128</sup> Josephus, *Antiquities* 16.5.5.

<sup>129</sup> Galen 9.214.

<sup>130</sup> Pliny, *NH* 34.1.2: "Summa gloria nunc in Marianum conversa, quod et Cordubense dicitur. Hoc a Liviano cadmeam maxime sorbet et aurichalci bonitatem imitatur in sestertiis dupondiarisque."

<sup>131</sup> Pliny, *NH* 34.2: "Cyprio suo assibus contentis."

<sup>132</sup> Pliny, *NH* 34.1.

<sup>133</sup> Pliny, *NH* 34.1.

<sup>134</sup> *CIL* XIII, 2901.

Southeast Britain had used imported copper at the time of Caesar's invasion,<sup>135</sup> and although copper was worked further north during the Roman occupation at Plynlimmon, the Gt. Ormes Head, Anglesy, Caernarvon and in the Dee Valley,<sup>136</sup> these forward areas were not under secure Roman control during Nero's principate and can hardly have been sources for the copper required by the mint. Workings of copper in Upper and Lower Germany were neither profitable nor extensive during the first century. There was prospecting of early imperial date in the poor impregnations of azurite and malachite at Blauberg in the Saar and at Kerdel;<sup>137</sup> but the copper workings in the ancient mines at the mouth of the Ems<sup>138</sup> lay beyond Roman territory under Nero. Illyria provides hardly any evidence of Roman mining and Dacia was outside Roman control at this period. There were extensive ancient copper workings at Majdanpek in the mountains of Moesia, but Davies has shown that the mines were abandoned when the Romans consolidated the Danube bank.<sup>139</sup>

The principal sources of calamine, the second mineral required in the production of orichalcum,<sup>140</sup> are also mentioned by Pliny. It came from overseas, was formerly also found in Campania and now in the territory of Bergamo. "It is also reported to have been recently discovered in the province of Germany,"<sup>141</sup> a reference to the important mine at Stollberg which subsequently became the principal center of bronze production in the Empire.<sup>142</sup> These deposits were discovered some time between A.D. 57 and 77.<sup>143</sup>

<sup>135</sup> Caesar, *BellGall* v.12.4.

<sup>136</sup> Davies, *Mines*, pp. 155 ff.

<sup>137</sup> Davies, *Mines*, pp. 177-78; the inscription *CIL* XIII, 4238 was found at Blauberg.

<sup>138</sup> Davies, *Mines*, pp. 179 f.

<sup>139</sup> Davies, *Mines*, pp. 218 ff.

<sup>140</sup> Cf. note 131 above.

<sup>141</sup> Pliny, *NH* 34.2.2.

<sup>142</sup> Willers, "Neue Untersuchungen über die römische Bronze-Industrie von Capua und von Niedergermanien," *Jahrbuch des provinziellen Museums zu Hannover* 1906-7, p. 64.

<sup>143</sup> Willers dates the discovery between A.D. 57, when Pliny seems to have been in Upper Germany, and A.D. 74.

## THE NON-GLOBE AÆS MINT

Aes of the non-globe type circulated almost exclusively in Italy. There is no reason to doubt that the mint which produced this coinage was in fact the mint of Rome, for which we have repeated authorities in the senatorial office of the *tresviri monetales*, which continues to be found on inscriptions down to the third century A.D.,<sup>144</sup> and in the series of mint inscriptions from Rome.<sup>145</sup> The city was the obvious center for supplying coinage to Italy, and the vast urban population (estimated at a million at this period<sup>146</sup>) must have created a major demand for small change. In so far as the mint used freshly mined metal, there is no reason to doubt Pliny's statement that it used copper from Cyprus for its asses, and copper from Corduba as the basic constituent for the orichalcum of its sestertii and dupondii,<sup>147</sup> the alloy itself being made by heating the copper in a bed of calamine which presumably came from the Bergamo deposits.<sup>148</sup>

## THE GLOBE AÆS MINT

Aes of the globe type enjoyed an almost exclusive circulation in Gaul, Britain, the Rhine and Vindelicia south of the Danube, and must have been struck in one of these western provinces. The use of an important second mint in the west was fairly general imperial practice during the first century. Vespasian continued to use the same mint with the same globe and characteristic bust truncation for a fairly large group of aes which circulated primarily in the same western provinces.<sup>149</sup>

<sup>144</sup> F. Lenormant, *La monnaie* III, pp. 185 ff.

<sup>145</sup> *CIL* VI, 42, 43, 44, 239, 791, 1145, 1607 etc.

<sup>146</sup> Frank, *Survey* V, p. 140.

<sup>147</sup> Pliny, *NH* 34.1.2.

<sup>148</sup> In "The Quality of Nero's Orichalcum," *SM* 1966, pp. 101-105. I have commented on the lower percentage of zinc in several of Nero's orichalcum coins of the non-globe mint, and suggested that many of the coins at Rome were struck from secondary alloy derived from remelted old coins.

<sup>149</sup> See *BMCRE* II, pp. lviii ff.

Sydenham<sup>150</sup> and Laffranchi<sup>151</sup> have suggested that "western-style" groups can be distinguished among the Agrippa asses and Claudius' *aes*, although the detailed evidence of site finds has not yet been analyzed to settle finally whether or not their criteria are sound.<sup>152</sup> This mint seems to have been the successor to the mint at Lugdunum which issued the extensive Altar series up to the early years of Tiberius,<sup>153</sup> a series which constituted the main currency of the Rhine frontier at the time, and again struck semisses of the Altar type under Claudius.<sup>154</sup> Lyons was in fact an eminently suitable place for a western *aes* mint, in a perfectly safe area yet conveniently situated to supply the small change needed by the frontier armies of the Rhine, Britain and Upper Danube, and equally accessible to the principal sources of copper.

Under Nero freshly mined copper for the globe type sestertii and dupondii in orichalcum would almost certainly come from Corduba; and from Spain again, or possibly from Cyprus, would come the freshly mined copper for the asses and semisses. The calamine needed to manufacture the copper into orichalcum may have come from Bergamo, but it is far more likely that it came from the newly discovered mines at Stollberg. Although Spain was an extremely important source for the freshly mined copper used for Nero's western *aes*, Nero's mint was certainly not situated there. We have seen above that finds of Nero's *aes* are not common in Spain and the Iberian peninsula was not exclusively or even predominantly provided with *aes* of Nero's globe type. For similar reasons the Danubian provinces also can be excluded, and neither Britain nor

<sup>150</sup> Sydenham, *Nero*, pp. 30-31 and "The Mint of Lugdunum," *NC* 1917, pp. 82-83.

<sup>151</sup> L. Laffranchi, "La monetazione imperatoria e senatoria di Claudio 1° durante il Quadriennio 41-44 d.º Cr.º," *RIN* 1949, pp. 41-48, though Laffranchi there suggests that the western European mint may be in Spain.

<sup>152</sup> S. Jameson, "The Date of the Asses of M. Agrippa," *NC* 1966, pp. 95-124, on the other hand, argues that all three groups of Agrippa asses that she distinguishes were struck in Rome, but she does not support her argument with find evidence. The absence of countermarks from her group (a), and the presence of countermarks localized in the western provinces on groups (b) and (c) suggests to me that these latter two groups may be the product of a western mint.

<sup>153</sup> *RIC*, p. 91, nos. 359-371.

<sup>154</sup> *RIC*, p. 130, nos. 70-71.

Africa had the central position required. Germany remains a possibility, but was not conveniently placed between the sources of freshly mined copper and some of the areas ultimately supplied, notably Raetia, West Gaul and the Rhone valley. Gaul on the other hand would have enjoyed the great advantage of centrality and Lyons, its capital, enjoyed that advantage par excellence. Lyons, as Strabo tells us, "commands Gaul like an acropolis."<sup>155</sup> It lies at the center of the river communications of the country and had been made the center of Agrippa's road system. It was conveniently near the Rhine-Danube reentrant and all the normal routes from South Spain to the Rhine, North and West Gaul, Britain and Raetia would part ways here.<sup>156</sup>

Lyons, moreover, had a long tradition as a mint city. Antony had struck quinarii there as governor in 42/41 B.C., and signed them with the name of the town.<sup>157</sup> We have Strabo's explicit statement for the existence there of a mint for gold and silver under Tiberius.<sup>158</sup> It was the mint which produced the extensive Altar series under Augustus and Tiberius and the commemorative Altar semisses struck under Claudius.<sup>159</sup> Its position as a mint city is further attested by several inscriptions from the immediate environs,<sup>160</sup> and by the presence of an urban cohort designated "ad monetam."<sup>161</sup> Under

<sup>155</sup> Strabo iv.6.11. Cf. Ammianus Marcellinus xv.11.17.

<sup>156</sup> M. P. Charlesworth, *Trade-routes and Commerce of the Roman Empire* (2nd ed. Cambridge, 1926), pp. 183 ff. and 192 ff. H. R. W. Smith's objections in *Problems Historical and Numismatic of the Reign of Augustus* (Berkeley, 1951), pp. 161-174, it should be noted, were directed against the view that Lugdunum was the sole gold and silver mint in the early empire; he did not attempt to deny that Lugdunum was a mint, though he strove to weaken Strabo's apparently straightforward statement of contemporary fact. He emphasized the difficulties in navigating the Rhone, but the numerous inscriptions of the companies of navigators of the Rhone and Arar (in *CIL* XIII) greatly undermine the force of this point as do the extensive Roman quays along the river at Lyons (O. Brogan, *Roman Gaul* [London, 1953], p. 103) and the extensive quays of more modern date at places like Avignon. In any case Agrippa's road system followed the line of the main river routes, and there were good roads up the Rhone valley.

<sup>157</sup> Sydenham, "Lugdunum," *NC* 1917, p. 55.

<sup>158</sup> Strabo 4.3.2.

<sup>159</sup> Sydenham, *NC* 1917, p. 86.

<sup>160</sup> *CIL* XIII, 1499, 1810, 1820

<sup>161</sup> *CIL* XIII, 1499.



Tiberius, no doubt, the troops must have played an important part in the security arrangements for the minting of gold and silver at Lyons; but even after the striking of coinage in the precious metals was transferred to Rome,<sup>163</sup> Lyons remained the only city in the provinces, apart from Carthage, to be garrisoned by an urban cohort. Its presence was first mentioned by Tacitus in A.D. 21 when Acilius Aviola used it to check the revolt of the Andecavi.<sup>163</sup> Cohort XVIII formed the garrison in 69<sup>164</sup> and I Flavia Urbana took its place by 73.<sup>165</sup> This Lugdunum cohort was expressly called COH XVII LVGDVNENSIS AD MONETAM in the dedication to Lucius Fufius at Equestre, an inscription which cannot be dated before the time of Claudius because the cohort is XVII nor very much later because the man had no cognomen.<sup>166</sup> There is therefore good reason for attributing the globe type *aes* of the mid-first century to Lyons, and for regarding it as a successor to the important western *aes* coinage of the Altar series.<sup>167</sup>

<sup>163</sup> See *BMCRE* I Intro., and Sutherland *Coinage in Roman Imperial Policy*. For my objections to M. F. Grant's point of view in *NC* 1955, pp. 39-54 see p. 12 above.

<sup>163</sup> Tacitus, *Annals* iii.41.

<sup>164</sup> Tacitus, *Histories* i.64.

<sup>165</sup> *CIL* XII, 2601.

<sup>166</sup> See Mommsen in *Hermes* 16 (1881), p. 645, n. 4.

<sup>167</sup> I have compared the relative proportion of altar to moneyers' and imperial *aes* under Augustus/Tiberius and of globe to non-globe *aes* under Nero in finds from Gaul and Italy in the appendix to my article "A Group of Early Imperial *Aes* from Augers-en-Brie," *NC* 1967, pp. 43-47.

### 3. GOLD AND SILVER

#### DATED ISSUES A.D. 54-64

For the first ten years of Nero's principate the gold and silver struck at Rome bore tribunician dates TRP to TRP X, which clearly differentiated successive issues. During the first tribunician year to December 55 three aureus and denarius types were issued—one commemorating the deification of Claudius, the second with heads of Nero and Agrippina facing (PLATE I, 2) and the third with jugate busts of Nero and Agrippina (PLATE I, 3).

In TRP II a new obverse type was introduced (PLATE I, 4) which remained basically unchanged throughout the rest of the dated gold and silver coinage. Its legend was NERO CAESAR AVG IMP, and Nero's head was shown facing right with the hair drawn down over his forehead. During the course of these dated issues slightly older portraits of Nero were gradually substituted, and in the issue of the ninth tribunician year Nero's hair was shown for the first time raised in tiers above his forehead, the "in gradus formata" style described by Suetonius.<sup>1</sup> The reverse type of both the aurei and the denarii dated TRP II was EX SC within an oak wreath, the *corona civica*, and an outside legend PONTIF MAX TRP II PP completed Nero's titles from the obverse. In this year there was a rare issue of gold quinarii with the usual quinarius reverse type of Victoria. The aurei and denarii dated TRP III, IIII and V retained the same obverse and reverse types and merely altered the tribunician year in the reverse legend. All coins dated TRP VI included in their reverse legend COS IIII Nero's fourth consulship which began January 1, 60.<sup>2</sup>

In the issues dated TRP VII three new reverse types of Virtus, Ceres and Roma (PLATE I, 11, 12, 13) were introduced to replace that of the Corona Civica. Coins of the new Virtus and Ceres types seem to be far commoner than either the old Corona Civica or the

<sup>1</sup> Suetonius, *Nero* 51.

<sup>2</sup> Degrassi, *I fasti*, p. 16.

new Roma type in the issues of this year.<sup>3</sup> Indeed it is only when examples of the Corona Civica type and Roma type are taken together that their numbers equal those of either the Virtus or of the Ceres type dated TRP VII. It is interesting to note that the reverse legend of the Corona Civica type reads counterclockwise and so did that of the new Roma type, whereas the reverse legends of the Virtus and Ceres types read clockwise. This might possibly suggest that the new Virtus and Ceres types were introduced at the beginning of the year and struck alongside the Corona Civica types, and that the Roma type was introduced to replace the Corona Civica type later in the year. In the TRP VIII issue the three types of Virtus, Roma and Ceres were struck in both gold and silver; in the TRP VIII issue all three types were again struck in gold, but Virtus and Roma alone in silver; in the TRP X issue only two types, Virtus and Roma, were struck, in both gold and silver.<sup>4</sup>

*Cat. I-21, 35-53. PLATE I.*

#### POST-REFORM UNDATED ISSUES

The undated gold and silver is a coinage struck on a reduced weight standard, on which the portraits are all later than on the dated series.<sup>1</sup> The legends NERO CAESAR AVGVSTVS and NERO CAESAR, both of which lack the praenomen IMP, must belong to the period before mid-A.D. 66. No significant chronological distinction can however be drawn between these two forms. Except

<sup>3</sup> The relative proportion of the aureus types in TRP VII can be seen in the numbers represented in the large hoard from Pudukota (*NC* 1898, pp. 304-20); in other hoards which contain aurei of Nero TRP VII from Pompeii 1812 (*Pompeianarum Antiquitatum Historia* I.3 [Naples, 1860], pp. 250-51); Utrecht (*Opgravingen op het dompe in te Utrecht* 1934, pp. 49ff.); Pontalbon (*SNR* 1900, p. 164); Zirkowitz (*Mitteilungen CC Steiermark* 2, 173; 3, 157; 5, 109); and Vienna (*Jahrbuch für Altertumskunde* 1909, pp. 90-95; in the collections of the BM, Oxford, Glasgow, Paris, Milan and Turin; and in the coins from Sale catalogues represented in the BM collection of photographs.

	<i>Pudukota</i>	<i>Other Hds.</i>	<i>Coll.</i>	<i>Sale Photos</i>
<i>Cat. 10 (RIC 25)</i>	9	—	4	6
11 ( <i>RIC 26</i> )	13	2	6	16
12 ( <i>RIC 27</i> )	12	4	5	17
13 ( <i>RIC 28</i> )	2	1	4	6

<sup>4</sup> For a list of these varieties under Nero see the catalogue below.

on plated denarii, NERO CAESAR was merely used with the AVGVSTVS GERMANICVS type on which the reverse legend completed the titulature from the obverse. After Nero assumed the praenomen IMP in mid-66 there were two forms of obverse legend on the gold and silver: IMP NERO CAESAR AVGVSTVS and IMP NERO CAESAR AVG PP. The reverse types in the issue with IMP NERO CAESAR AVGVSTVS were taken directly from, and must therefore have directly followed, the preceding issue with NERO CAESAR AVGVSTVS; but on denarii with IMP NERO CAESAR AVG PP in addition to the types that had been used with NERO CAESAR AVGVSTVS and IMP NERO CAESAR AVGVSTVS there were three new reverse types peculiar to the issue: the anepigraphic type of an eagle between two standards; and fresh varieties of the Roma and Salus types with the legends in the reverse field. IMP NERO CAESAR AVG PP must thus have been the latest form of reverse legend on Nero's gold and silver.

**Issue 1** of the undated gold and silver coinage on the reformed standard had the obverse legends NERO CAESAR, and NERO CAESAR AVGVSTVS. In gold there were eight distinct reverse types: Augustus Germanicus; Augustus Augusta; Jupiter Custos; seated Roma; Salus; the Temple of Vesta; the Temple of Janus; and Concordia Augusta.

The first six of these types were regularly struck in silver too during this issue; but while the types of Janus temple and of Concordia Augusta are known in silver, they are extremely rare, are not represented in hoards, and were certainly not substantive denarius types. In this we seem to have evidence of an initial production of gold in two reverse types (accompanied by a token emission of silver) continuing the "two reverse type" pattern of the gold in TRP X, before the productive capacity was expanded. Among the other aurei and denarii with this obverse legend, the reverse types of Jupiter Custos and Salus are by far the commonest. These two subsequently became the sole substantive reverse types in issues 2 and 3a, and it seems fairly certain that they continued to be struck in Issue 1, after the other reverse types were discontinued. We can therefore distinguish three phases within the issue:

- 1 a. Janus and Concordia types, with substantive issues of aurei (but accompanied by a token issue of denarii).
- 1 b. The six reverse types of Augustus Germanicus, Augustus Augusta, Jupiter Custos, Roma, Salus and Vesta with substantive issues in both gold and silver.
- 1 c. The continuing issue of Jupiter Custos and Salus types in both gold and silver.

*Cat.* 22–29, 54–61, PLATES I–II.

**Issue 2** had the obverse legend IMP NERO CAESAR AVGVSTVS. Its aurei were struck in two reverse types, Jupiter Custos and Salus, both of which were taken over directly from the preceding issue. Besides these two types of Jupiter Custos and Salus, the denarii also used the seated Roma type from the preceding issue, but it is extremely rare and cannot have been struck in any numbers.

*Cat.* 30, 31, 62–64. PLATE II.

**Issue 3** had the obverse legend IMP NERO CAESAR AVG PP. The aurei with this obverse legend continued to use the types of Jupiter Custos and Salus unchanged from the previous two issues. The denarii followed the aurei in using these two types, but they also had three further types which were struck solely in silver: a new anepigraphic type of an eagle between two standards and modified forms of both Salus and Roma types, now with their legends across the reverse field and not in the exergue. We can therefore distinguish two stages:

- 3 a. Aurei and denarii with the reverse types of Jupiter Custos and Salus continued without change from Issues 1 and 2.

*Cat.* 32, 33, 65, 66. PLATE II.

- 3 b. Denarii alone in two substantive types of Salus with its legend across the field rather than in the exergue and of the new eagle and standards.

*Cat.* 67–69. PLATE II.

Throughout Nero's reign the issues of gold and silver ran closely parallel to each other; but a number of minor discrepancies between them clearly suggests that the denarii were in fact struck immediately

after the similar aurei of each issue. It has been noted that in the dated group the Ceres type, which was abandoned during the issue dated TRP VIII, is found on the aurei of that year but not on the denarii. Similarly in the undated series both Janus temple and Concordia Augusta types are comparatively common on the gold of the first issue, but on the silver the Janus temple type is not found and the Concordia Augusta is extremely rare. In the later issues with IMP NERO CAESAR AVG PP, the fresh forms of reverse type were introduced during the issue of the denarii, and have left no trace on the aurei.

#### PLATED DENARII

It is important to distinguish from the main series a group of unofficial plated denarii,<sup>5</sup> as the inclusion of some of these in older catalogues has tended to obscure the pattern of the silver issues. These plated forgeries are known in both the dated and the undated series. The obverse and reverse types were almost always those used for the regular denarii. Their dies were often in quite good style and may sometimes have been official dies illegally appropriated from the mint; but the forgers did not hesitate to use obverse and reverse dies in combinations that were quite unknown on the regular coinage. One plated denarius muled an obverse of Nero with the common PONTIF MAXIM reverse type of Tiberius. The obverse legend NERO CAESAR, confined on regular denarii to the reverse type of Augustus Germanicus which completed the legend from the obverse, was used on plated denarii with several other reverse types of the undated series. On regular coins IMP NERO CAESAR AVGVSTVS was only found on Salus denarii with the reverse legend SALVS in the exergue, but on a plated specimen it was muled with a die that had SALVS across the reverse field. Regular denarii dated TRP VI included Nero's fourth consulship in their reverse PONTIF MAX TRP VI COS IIII PP, but plated denarii had PONTIF MAX VI PP alone, omitting all reference to Nero's consulship as the issue TRP II to TRP V had done.<sup>6</sup>

<sup>5</sup> For a fuller discussion of Nero's plated denarii see Chapter 2 and its references.

<sup>6</sup> The varieties of plated denarii bearing Nero's titulature are listed on p. 243.



#### 4. Aēs WITHOUT SC

##### THE ABSENCE OF SC

The *aēs* of Nero without SC has long been a puzzle. Recent research has thrown considerable doubt on the older view that down to the time of Gallienus the Roman Imperial coinage was controlled by a dyarchy of Senate and Emperor, and that SC and its absence denoted the product of a Senatorial and Imperial mint respectively.<sup>1</sup> It has become increasingly plain that the distinction was rather one of form than of final intent.<sup>2</sup> Nonetheless SC was given a prominent place on the *aēs* coinage of the Julio-Claudian period and Nero was the first emperor to omit it from any considerable number of his bronze and copper coins, an omission which is the more remarkable in view of the way he introduced a special senatorial reference EXSC on the gold and silver at the beginning of his principate.<sup>3</sup>

A careful examination and analysis of the coins which seem to lack SC enables us to define more closely the range and scope of the issues which genuinely omitted it. When worn and tooled examples are excluded, it is clear that the *aēs* is invariably the product of the mint of Rome, and falls into two compact chronological groups. The first consists of copper asses, semisses and quadrantes. The second, slightly later than the first, consists of orichalcum sestertii, dupondii, asses and quadrantes. But each of these denominations, both in copper and orichalcum, is subsequently struck by Nero with the traditional SC on the reverse.

##### COPPER ASSES WITHOUT SC

The earliest group consists of asses in copper without SC of the Apollo and Genius reverse types. All the copper asses of these types at the mint of Rome were struck without SC:

<sup>1</sup> Cf. Michael Grant, *From Imperium to Auctoritas* (Cambridge, 1946), p. 121.

<sup>2</sup> H. Mattingly, *The Emperor and His Clients* (Todd Memorial Lecture, Sydney, 1948), p. 6.

<sup>3</sup> Sutherland, *Coinage in Roman Imperial Policy*, pp. 152 ff.



**Cat. 242**

*Obv.*: NERO CLAVDIVS CAESAR AVG GERM PM TRP IMP PP

Head bare r.

*Rev.*: Nero laureate in flowing robes of Apollo Citharoedus walking  
r., l. holding lyre, r. playing it. No legend or SC.

Paris 11.62 gm. A301 P301 PLATE IX

**Cat. 243**

*Obv.*: NERO CLAVD CAESAR AVG GERM PM TRP IMP PP

Head bare r.

*Rev.*: As 242.

Walters<sup>4</sup> 11.39 gm. A302 P302

Signorelli 1180 A303 P302

Imhoof Blumer 624 A304 P303

**Cat. 244**

*Obv.*: As 221 but head bare l.

*Rev.*: As 243.

Oxford 11.42 gm. A305 P304

BM 238<sup>5</sup> 12.59 gm. A306 P304

**Cat. 245**

*Obv.*: NERO CLAVD CAESAR AVG GERM PM TRP IMP

Head bare r.

*Rev.*: As 242.

Rome, Terme<sup>6</sup> 12.00 gm. A307 P305

Glasgow 73<sup>7</sup> 10.46 gm. A307 P305

Santamaria, 1924 A307 P305

**Cat. 246**

*Obv.*: NERO CLAVDIVS CAESAR AVG GERMANIC

Head bare r.

<sup>4</sup> *BMCRE* I, pl. 48, 6.

<sup>5</sup> *BMCRE* I, pl. 44, 10.

<sup>6</sup> F. Gneccchi, *I Medaglioni Romani* (Milan, 1912), pl. 142, 2.

<sup>7</sup> Anne S. Robertson, *Roman Imperial Coins in the Hunter Coin Cabinet I* (London/Glasgow/New York, 1962), pl. 22, 73.

*Rev.*: As 242 but with legend PONTIF MAX TRP IMP PP

Munich		A308	P306
Vatican	10.50 gm.	A309	P307
Vatican	10.80 gm.	A310	P308
Paris	11.12 gm.	A311	P308
Oxford	10.66 gm.	A312	P309
Mazzini <sup>8</sup>	10.80 gm.	—	—
Newdigate		—	—
Tiber find <sup>9</sup>		—	—
Tiber find		—	—
BM 235 <sup>10</sup>	11.80 gm.	A313	P310
Walters	11.53 gm.	A314	P311
Prince W I, 193		A315	P312
Vierordt 874		A316	P313

PLATE IX

### Cat. 247

*Obv.*: As 246 but head bare l.

*Rev.*: As 246.

Paris	11.67 gm.	A317	P314
Copenhagen	13.30 gm.	A317	P314
Florence	10.40 gm.	A318	P315
Oxford	11.27 gm.	A319	P316
Mac Dowall <sup>11</sup>	8.77 gm.	A319	P317
Weber 1058		A319	P318
Prince W. II, 588		A320	P332

### Cat. 248

*Obv.*: NERO CLAVDIVS CAESAR AVG GERMAN Head bare r.

*Rev.*: As 246.

Oxford	12.25 gm.	A321	P319
Tiber find		—	—
Tiber find		—	—

<sup>8</sup> *RIN* 1913, p. 22 and pl. 1, 4.

<sup>9</sup> Found in the Tiber, now in the Terme Museum, Rome.

<sup>10</sup> *BMCRE* I, pl. 44, 7.

<sup>11</sup> Bought in Rome, said to have been found in the city.

**Cat. 249***Obv.*: NERO CLAVDIVS CAESAR AVG GERMA

Head bare r.

*Rev.*: As 246.

Munich		A322	P320
Mainz		A323	P321
Copenhagen	12.60 gm.	A324	P320
Sydenham <sup>12</sup>		A325	P322
Levis 386		A325	P322

**Cat. 250***Obv.*: As 249 but head bare l.*Rev.*: As 246.

BM 236 <sup>13</sup>	11.99 gm.	A326	P323	PLATE IX
Paris	11.88 gm.	A327	P324	

**Cat. 251***Obv.*: NERO CLAVDIVS CAESAR AVG GERM PM TRP IMP PP

Head bare l.

*Rev.*: GENIO AVGVSTI

Genius standing l. by lighted altar, holding patera and cornucopiae.

Mazzini<sup>14</sup> 10.60 gm.**Cat. 252***Obv.*: NERO CLAVD CAESAR AVG GERM PM TRP IMP PP

Head bare r.

*Rev.*: As 251.

Rome, Terme	12.02 gm.	A328	P325
Vienna	11.00 gm.	A328	P326
Mainz		A329	P327
Glasgow 72 <sup>15</sup>	10.87 gm.	A330	P328
Oxford	10.50 gm.	A331	P329
Rome, Capitol <sup>16</sup>			

<sup>12</sup> *BMCRE* I, pl. 44, 9.<sup>13</sup> *BMCRE* I, pl. 44, 8.<sup>14</sup> *RIN* 1913, pp. 21 f., and pl. 1, 4.<sup>15</sup> *RIC Hunter* I, pl. 22, 72.<sup>16</sup> Probably found in Rome.

**Cat. 253***Obv.*: NERO CLAVD CAESAR AVG GERM PM TRP IMP P

Head bare r.

*Rev.*: As 251.

Madrid

A334 P332

**Cat. 254***Obv.*: NERO CLAVD CAESAR AVG GER PM TRP IMP PP

Head bare r.

*Rev.*: As 246.

BM 234

14.97 gm. A332 P330

**Cat. 255***Obv.*: As 254.*Rev.*: As 251.Rome, Terme<sup>17</sup>

11.75 gm. A333 P331

PLATE IX

Mattingly and Sydenham described the rare coins with the anepigraphic reverse type of Apollo as dupondii with an As type,<sup>18</sup> but they are undoubtedly copper asses. Specimens which are not patinated have the normal red color of copper, and spectrographic analysis has confirmed this for the British Museum example. (Nero's dupondii at both Rome and Lugdunum were always struck in orichalcum). The weights of the anepigraphic asses range from 11.42 to 12.59 gm., which is well below that of the dupondii without SC but very close to that of the other copper asses without SC.

The Apollo and Genius copper asses without SC are thoroughly Roman in style and undoubtedly circulated in the neighborhood of Rome. One Genius As was found in excavations at Rome; four Apollo asses have been found in the Tiber; and a fifth came from the city of Rome.<sup>19</sup> Information about coin finds in the western provinces

<sup>17</sup> Found during excavations in Rome, *RIN* 1909, p. 20, 5, and Gnechi, *Medaglioni*, pl. 141, 10.

<sup>18</sup> *RIC* I, p. 171.

<sup>19</sup> *Cat.* 246, 248, 252.

is generally far more complete than for Italy, but has not yet yielded a single example.<sup>20</sup>

The issue of these copper asses was not especially small. I have found 34 obverse dies used in conjunction with five reverse dies of the anepigraphic Apollo type, 8 of the GENIO AVGVSTI, and 19 of the Apollo PONTIF MAX TRP IMP PP type. There are very few die links and none which connects different forms of obverse legend or different reverse types; pieces from identical dies are comparatively unusual; and there are almost as many obverse as reverse dies.

The evidence of portraiture shows conclusively that the copper asses without SC were struck before the ordinary copper asses of the mint of Rome. When Nero's head is shown in right profile on the copper asses without SC,<sup>21</sup> the hair is always "in gradus formata."<sup>22</sup> It is distinctly raised from his forehead and all the curls fringing the forehead as far back as the ear are shown with this forward curve. The portrait is close to that on the aurei and denarii dated TRP VIII and VIII (A.D. 61/62 to 62/63)<sup>23</sup> and probably not so late as on those dated TRP X (A.D. 63/64).<sup>24</sup> The treatment of the rest of the hair has many points of contact with the later dated aurei and denarii. It is generally flat,<sup>25</sup> sometimes with a striking zonal treatment with thick rope-like strands.<sup>26</sup> This seems inspired by the dated gold and silver of A.D. 61/62 to A.D. 63/64<sup>27</sup> but is less advanced than the spirited rendering of the earliest undated gold<sup>28</sup> or the copper asses with SC.<sup>29</sup> The bust truncation often has, in

<sup>20</sup> Copper asses of the Apollo and Genius' types have frequently been found in the western provinces, but they are the product of the distinctive Lugdunum mint. They always have the Lugdunum globe and characteristic bust truncation; the reverse always has SC; and in the Apollo series they use the form of legend PM TR POT IMP PP which is peculiar to Lugdunum on the copper asses.

<sup>21</sup> PLATE IX, 242, 246, 255.

<sup>22</sup> Suetonius, *Nero* 51.

<sup>23</sup> PLATE I, 8, 14, 19.

<sup>24</sup> PLATE I, 20.

<sup>25</sup> PLATE IX, 242-55.

<sup>26</sup> E.g. PLATE IX, 242.

<sup>27</sup> PLATE I, 14, 19, 20.

<sup>28</sup> PLATE I, 22 ff.

<sup>29</sup> PLATES X, 278; XI, 283-301.

greater or lesser degree,<sup>30</sup> the characteristic form of the dated gold and silver.<sup>31</sup>

These copper asses without SC, moreover, clearly preceded the orichalcum As series with the same reverse types of Genius and Apollo (both with and without SC). There is a striking development of portraiture within the orichalcum As series,<sup>32</sup> but no comparable progression in the issue of copper asses without SC; and although the copper asses have many portraits that are quite close to those on the earlier orichalcum asses, they show nothing comparable to the later orichalcum portraits. The characteristic bust truncation of the dated aurei and denarii can be seen on several copper asses, but where there are traces in the orichalcum series it is only present in a residual and minor degree. The treatment of the hair on the orichalcum asses is generally in higher relief and shows more naturalism; and Lugdunum, which began its *aes* production some time after the mint of Rome, used as its model the reverse of an orichalcum Apollo As, not that of a copper Apollo As without SC.<sup>33</sup>

#### COPPER SEMISSES WITHOUT SC

The parallel issue of copper semisses without SC consists of the following:

##### **Cat. 303**

*Obv.*: NERO CLAVDIVS CAESAR AVG GERM PM TRP IMP PP  
Head laur. r.

*Rev.*: No legend. Roma helmeted and draped seated l. on cuirass,  
r. holding wreath and resting l. hand on parazonium.

Ars Classica 15, 1438 5.72 gm. A401 P401

##### **Cat. 304**

*Obv.*: NERO CLAVDIVS CAESAR AVG GERMANIC  
Head laur. r.

<sup>30</sup> PLATE IX, 242-55.

<sup>31</sup> PLATE I, 2-19.

<sup>32</sup> PLATE X, 260-76.

<sup>33</sup> See below p. 99.

*Rev.*: As 303 but with legend PON MAX TRP IMP PP

Mazzini <sup>34</sup>	6.10 gm.	A402	P402	PLATE XII
Glasgow 82 <sup>35</sup>	6.74 gm.	A402	P402	
Walters	5.79 gm.	A402	P402	
Webb	5.46 gm.	A402	P402	

### Cat. 305

*Obv.*: NERO CLAVDIVS CAESAR AVG GERM

Head laur. r.

*Rev.*: As 304.

BM 260 <sup>36</sup>	7.13 gm.	A403	P403
Vierordt 872		A403	P403
Copenhagen <sup>37</sup>		A403	P403
Hollschek <sup>38</sup>	6.09 gm.		
Trau	6.01 gm.		
Trau	5.90 gm.		
Dorotheum	5.89 gm.		
Elmer	5.74 gm.		
Hernfeld	5.62 gm.		
Walla	5.48 gm.		
Pohl	5.42 gm.		

### Cat. 306

*Obv.*: As 303.

*Rev.*: CERTAMEN QVINQ ROM CO

Gaming table ornamented by two griffins. On it, urn l. and wreath r. Against its central leg rests a round shield.

Oxford	4.34 gm.	A404	P404
Paris	6.40 gm.	A404	P404
Naples	6.13 gm.	A404	P404

<sup>34</sup> *RIN* 1913, p. 22 and pl. 1, 3.

<sup>35</sup> *RIC Hunter* I, pl. 22, 82.

<sup>36</sup> *BMCRE* I, pl. 45, 4.

<sup>37</sup> Gnechi, *Medaglioni*, pl. 141, 12.

<sup>38</sup> The weight of this and of the seven following examples are given by G. Elmer, "Die Kleinkupferprägung von Augustus bis Traian," *NZ* 1934, p. 20.

## Cat. 307

*Obv.*: As 303.*Rev.*: As 306 but CERTAM QVINQ ROM CO

BM 259 <sup>39</sup>	6.34 gm.	A404	P405	PLATE XII
Glasgow 81	5.96 gm.	A404	P405	
Vautier 321	6.57 gm.	A404	P405	
Elmer <sup>40</sup>	5.90 gm.			
Walla	5.72 gm.			
Elsner	5.62 gm.			

These copper semisses without SC are easily distinguished from the normal orichalcum semisses at Rome by the size of their flans and dies, their comparatively heavy weight, and the reddish copper appearance of the metal. Their weight range is clearly higher than that of the Lugdunum copper semisses. Their obverse portraits are unmistakably Roman in style and idiom, and show about the same stage of development as the copper asses without SC.<sup>41</sup> Nero's hair is always shown "in gradus," but sometimes the tier is only at its first stage and has not been formalized into the distinctive forward curving arch.<sup>42</sup> The influence of the dated gold and silver<sup>43</sup> can usually be detected in the bust truncation and sometimes Nero's head is small and fails to make full use of the obverse field within the legend.<sup>44</sup>

A further indication of their approximately contemporary date is given by two overstrikes in the British Museum<sup>45</sup> and in Stockholm. Both seem to be copper asses of Nero without SC overstruck by the same pair of dies. In each case the reverse overstriking die is of the Genius type used for asses without SC, and the obverse overstriking die is of the type used at Rome in the issue of copper semisses without SC. Mattingly attributed the British Museum

<sup>39</sup> *BMCRE* I, pl. 45, 3.

<sup>40</sup> The weights of this and of the two following examples are given by Elmer, *NZ* 1934, p. 20.

<sup>41</sup> PLATE IX, 242-55.

<sup>42</sup> The semisses *Ars Classica* Sale xv, 1438, and BM 259 cited above.

<sup>43</sup> PLATE I, 19-20.

<sup>44</sup> As the semis BM 259 (*BMCRE* I, pl. 45, 3).

<sup>45</sup> PLATE XXII, a.



example to Lugdunum<sup>46</sup> and implied that it belonged to the opening phase of the new mint. He wrote "The obverse die is very small and the head is in the Roman style: the reverse is of normal size and of Lugdunum style. Traces of the original coin (a dupondius of the mint of Rome) with rev. Temple of Janus obv. . . CLAVD CAESAR AVG G . . still remain." We can, however, confidently attribute all the component parts of the overstrike to the mint of Rome. It has a copper flan of 14.94 gm.—the metal having been established by spectrographic analysis. As it is not of orichalcum, it can not have been originally a dupondius. Yet for an As, the highest denomination struck in copper, it is heavy but within the weight range of the copper asses without SC. Of its original obverse type, "CLAVD CAESAR AVG G . . ." and "... AR AVG GER PM TR P IMP P . . ." can be read on the London and Stockholm pieces respectively—a normal legend for Nero's copper asses without SC. Little remains of the original reverse type but there seem to be traces of a standing figure which may well have been that of Apollo citharoedus. The overstriking obverse die is a copper semis obverse die of the Roman mint: NERO CLAVDIVS CAESAR AVG GERM PM TR P PP, a youthful, bare, head of Nero to right. The overstriking reverse die is of the GENIO AVGVSTI type without SC, a type found exclusively at Rome.

Mattingly's attribution to Lugdunum seems to be based on his belief that the Genius type was normally struck at Rome only in orichalcum.<sup>47</sup> He did not realize that there was a series of copper asses at Rome of the Genius type omitting SC and his description of the overstrike does not make it clear that the type generally lacks SC.

Nero instituted the *Certamen Quinquennale* in A.D. 60,<sup>48</sup> but that date merely gives a *terminus post quem* for the certamen semisses; and the use of the type was not restricted to the years in which the certamen was celebrated.<sup>49</sup>

<sup>46</sup> *BMCRE* I, p. 273, 372 and note.

<sup>47</sup> *BMCRE* I, p. 243, note \*.

<sup>48</sup> Tacitus, *Annals* XIV. 20.

<sup>49</sup> See my note, "The Numismatic Evidence for the Neronia." *Classical Quarterly* 1958, pp. 192–94.

## COPPER QUADRANTES WITHOUT SC

The parallel issue of copper quadrantes without SC consists of the following:

**Cat. 336**

*Obv.*: NERO CLAVDIVS CAESAR AVG GERM

A helmet placed r. on column; against the cippus rests round shield; behind, spear slanting upward to r.

*Rev.*: PON M TR P IMP PP

A laurel branch.

Paris		A501	P501
Oxford	3.41 gm.	A501	P501
Vatican	2.50 gm.	A501	P501
Berlin	2.97 gm.		

**Cat. 337<sup>50</sup>**

*Obv.*: As 336 but legend NERO CLAVD CAESAR AVG

*Rev.*: As 336 but legend GER PON MAX TRP IMP PP

BM 286	3.31 gm.	A502	P502	PLATE XII
Oxford	2.58 gm.	A502	P502	
Blackburn	—	A502	P502	
Glasgow 85	3.52 gm.	A502	P502	
Rome, Capitol	—	A503	P502	
Hague	3.55 gm.	A504	P502	
Vienna	3.12 gm.	A504	P503	

The coin in the Capitol Museum came from excavations in Rome, but the other examples are unprovenanced. Although these quadrantes have no portraits and thus give little indication in themselves of their date and place of minting, finds suggest that the quadrantes with SC in both copper and orichalcum belong to the mint of Rome; and the use of IMP as a cognomen throughout shows that the whole series falls before mid-A.D. 66. The pattern of their issues generally shows the same development as that of the asses at Rome and they seem to be parallel to them.

<sup>50</sup> Gneecchi, *Medaglioni*, pl. 142, 3.

## ORICHALCUM DENOMINATIONS WITHOUT SC

The second group of *aes* without SC consisted of sestertii, dupondii, laureate and radiate head asses and quadrantes, all in orichalcum. The different denominations of this group seem to belong to the same general period, and to have been struck fairly soon after the issue of asses and semisses without SC in copper.

## ORICHALCUM SESTERTII WITHOUT SC

An examination of the dies of the sestertii without SC has made it possible to define far more clearly the extent of the group. It is necessary, of course, to exclude all sestertii on which the letters SC have been deliberately tooled out and those where the SC may have disappeared through wear and corrosion. Among the sestertii that seem genuinely to omit SC, it is usually possible to substantiate the same reverse die from several coins, none of which has any trace at all of SC. Several of these reverse dies belong to a die-linked chain in which all the reverse dies similarly omit SC. There is inevitably an element of uncertainty when a reverse die without SC is known merely from a single coin and is not die-linked to other sestertii without SC; but dies of all the main reverse types of sestertii omitting SC—Adlocutio, Annona, Congiarium and Decursio (showing Nero riding right accompanied by two foot soldiers)—are firmly placed in die-linked groups.

## Cat. 70

*Obv.*: NERO CLAVDIVS CAESAR AVG GERM PM TRP IMP PP  
Head laur. r. aegis.

*Rev.*: ADLOCVT COH (in exergue)

Nero standing l. on platform accompanied by praetorian prefect, addressing three soldiers, two of whom hold standards.

Paris 30.70 gm. A101 P101

Florence 31.30 gm. A102 P102

## Cat. 71

*Obv.*: As 70.

*Rev.*: ANNONA AVGVSTI CERES

Ceres seated l. holding torch and ears of corn; before her Annona standing holding a cornucopiae.

Vatican	22.60 gm.	A103	P103	PLATE II
Rome, Terme		A103	P104	
Paris	32.65 gm.	A104	P105	
Vatican	27.00 gm.	A105	P106	

**Cat. 72***Obv.*: As 70.*Rev.*: CONG II DAT POP

To l., a high platform on which Nero sits; in front, a seated official distributes largess to man ascending ladder.

Glasgow 54	25.69 gm.	A105	P107
Stockholm		A105	P107
Florence	27.38 gm.	A101	P108

**Cat. 73***Obv.*: As 70.*Rev.*: CONG II DAT POP

To r. a low platform on which Nero sits l.; beside him, the prefect standing; in front, soldier distributes largess to a citizen.

Oxford	29.42 gm.	A106	P109
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**Cat. 74***Obv.*: As 70.*Rev.*: DECVRSIO (in exergue)

Nero on horseback galloping r., preceded and followed by a foot soldier.

Vatican	25.70 gm.	A103	P110	PLATE II
Krausz 121		A103	P110	
Paris	27.60 gm.	A107	P111	
Vienna	26.10 gm.	A107	P111	
Glasgow 55 <sup>51</sup>	25.03 gm.	A107	P112	
Hague	31.00 gm.	A104	P113	
Egger XLIII, 442		A104	P113	
Rome, Terme		A104	P114	
Milan	26.50 gm.	A104	P115	

<sup>51</sup> *RIC Hunter* I, pl. 21, 55.

Mazzini 94	28.04 gm.	A104	P115
Oxford	27.24 gm.	A105	P116
Madrid		A108	P116
Madrid		A108	P116
Copenhagen	29.09 gm.	A101	P117
Paris	31.46 gm.	A101	P117

**Cat. 75***Obv.*: As 70.*Rev.*: DECVRSTO (in exergue)

Nero on horseback galloping r. followed by horseman holding vexillum.

Rome, Terme A109 P118

**Cat. 76***Obv.*: As 70 but head laur. l.*Rev.*: As 70.

BM 126	26.41 gm.	A110	P119
Vienna	27.80 gm.	A110	P120
Rome, Terme		A110	P119
Lyons		A110	P119
Ryan 2283		A111	P121

PLATE II

**Cat. 77***Obv.*: As 76.*Rev.*: As 71.

Copenhagen	27.15 gm.	A111	P122
Vatican	30.20 gm.	A112	P123
Oxford	26.69 gm.	A113	P124
Oxford photo.		A114	P125
Horsky 2932		A114	P126

**Cat. 78***Obv.*: As 76.*Rev.*: As 74.

Florence	28.52 gm.	A111	P127
Vatican	27.40 gm.	A111	P128
Rome, Terme		A111	P128

BM 155 <sup>52</sup>	27.04 gm.	A111	P128	PLATE III
Trau 438		A111	P128	
Stockholm		A111	P129	
Simon 247		A110	P129	
Milan	28.50 gm.	A110	P130	
Paris	26.20 gm.	A110	P129	
Glasgow 56	25.91 gm.	A115	P116	
Signorelli 1147		A115	P116	
Hall <sup>53</sup>		A115	P116	
Vienna	29.00 gm.	A115	P116	

**Cat. 79**

*Obv.*: NERO CLAVD CAESAR AVG GERM PM TRP IMP PP  
Head laur. r. aegis.

*Rev.*: As 74.  
Vatican 27.40 gm. A116 P127

**Cat. 80**

*Obv.*: As 79.

*Rev.*: As 75.  
BM 142bis 27.50 gm. A117 P131  
Madrid A117 P137

**Cat. 81**

*Obv.*: As 79 but head laur. l.

*Rev.*: As 70.  
Paris 29.80 gm. A118 P132  
Signorelli 1131 A118 P132

**Cat. 82**

*Obv.*: As 81.

*Rev.*: As 72 but CONG II DAT POP R  
Paris 28.48 gm. A119 P133  
Vatican 27.90 gm. A119 P134  
Vienna 28.30 gm. A118 P135

<sup>52</sup> BMCRE I, pl. 42, 5.

<sup>53</sup> BMCRE I, pl. 48, 3.

Paris	28.52 gm.	A118	P135
Walters 382		A118	P135
Madrid R. A.	28.68 gm.		

**Cat. 83**

*Obv.*: NERO CLAVD CAESAR AVG GER PM TRP IMP PP

Head laur. r.

*Rev.*: As 74.

Oxford 27.72 gm. A120 P136

Most of the sestertii without SC are unprovenanced, although one of the DECVR SIO type showing Nero accompanied by two foot soldiers was found at Ostia.<sup>54</sup> There is, however, no doubt from general considerations of their style and idiom that they were products of the mint of Rome. Heads in right profile invariably show traces of the aegis in front of Nero's bust; this is frequently seen on sestertii at Rome but never at Lugdunum which always had the globe. The obverse legends often use the abbreviations CLAVDIVS and GERM, which are repeatedly found at Rome but never at Lugdunum. The bust truncation is closely similar to that on many coins of the Roman mint, and is quite different from the characteristic M truncation of Lugdunum. Though most of their reverse types were used at both Rome and Lugdunum in the SC series, the type of DECVR SIO with Nero accompanied by two foot soldiers was used exclusively at Rome.

The condition and state of wear of several pieces clearly show that the group passed into general circulation as ordinary sestertii, whatever the original purpose of the issue had been.

The reverse types of these sestertii without SC were all early types at the mint of Rome. No authenticated piece without SC has the praenomen IMP in Nero's obverse titulature; and these reverse types were never employed at Rome with the praenomen IMP, even in an SC series. This places them all before the middle of A.D. 66 when Nero took the praenomen "imperator" into his titulature.

<sup>54</sup> Now in the Museum at Ostia. There are no signs of SC on its reverse. Although the coin is somewhat corroded it almost certainly never had SC, as sestertii of this type without SC are not uncommon whereas those with SC are extremely rare.

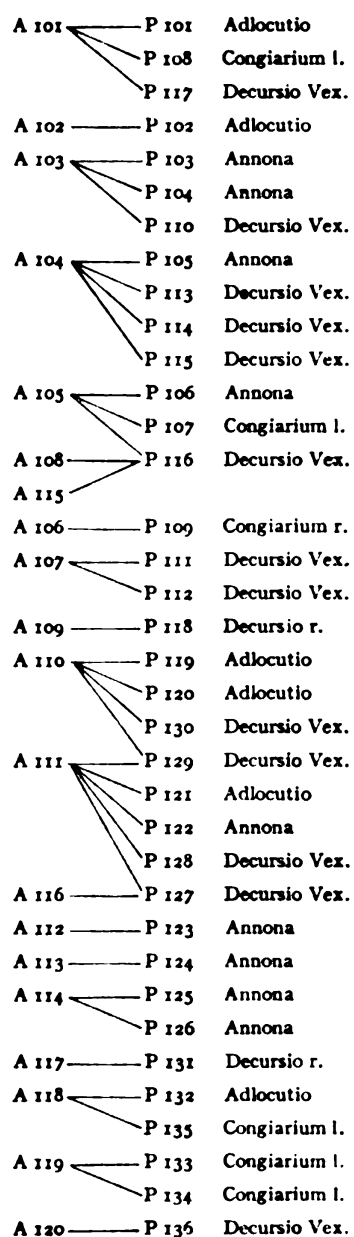


FIG. I. SESTERTII WITHOUT SC  
 ROME ISSUE II



Sestertii without SC nearly always had the comparatively rare forms of obverse legend: NERO CLAVDIVS CAESAR AVG GERM PM TRP IMP PP and NERO CLAVD CAESAR AVG GERM PM TRP IMP PP

The most common form of obverse legend on SC sestertii without the praenomen IMP at the Roman mint: NERO CLAVD CAESAR AVG GER PM TRP IMP PP occurs only once, and the fairly common form: NERO CLAVDIVS CAESAR AVG GER PM TRP IMP PP is never found on sestertii that omit SC.

The portraits on the sestertii without SC are invariably early for the *aes*, but seem to be closer to the orichalcum asses without SC than to that of the copper asses without SC. The obverse portraits in right profile always showed Nero's hair "in gradus formata," sometimes in a pronounced forward arch, but at other times with the front curl bending upward back over itself in a less advanced way.<sup>55</sup> Some obverse dies showed Nero's hair in thick rope-like strands, a treatment closely paralleled in the obverse of an orichalcum As without SC.

Sometimes the engraver did not make full use of the field for his obverse portrait; and sometimes the letters of the obverse legend were badly spaced and crowded at the end. This strongly suggests the product of an engraver unaccustomed to work in the dimensions of a sestertius die and with no satisfactory models to copy. One obverse die used with two reverse dies omitting SC was also used on a uniface piece.<sup>56</sup> All this very strongly suggests an early place in Nero's *aes* issues.

The weight standard of these sestertii without SC affords further evidence of their early date. The sestertius standard dropped steadily during the later Julio-Claudian period. The weights of the sestertii without SC cover a fairly wide range but fall between 26 and 28.5 gm., below the main Claudian range (28 to 30.5 gm.) and above Nero's sestertii with the praenomen IMP (24.5 to 26 gm.), but in the upper reaches of Nero's main sestertius series with SC at Rome (24 to 28.5 gm.).<sup>57</sup>

<sup>55</sup> PLATE II, 71.

<sup>56</sup> *Helbing Sale* October 24, 1927, 3429.

<sup>57</sup> See table of sestertius weights, Appendix II, Table 5.

## ORICHALCUM DUPONDII WITHOUT SC

The parallel issue of dupondii without SC is known from the following:

**Cat. 177**

*Obv.*: NERO CLAVDIVS CAESAR AVG GERM PM TRP IMP PP

Head bare r.

*Rev.*: VICTORIA AVGVSTI No SC or mark of value.

Victoria draped, flying l., r. holding wreath, l. a palm.

Walters Coll. 15.74 gm. A2001 P2001 PLATE V

**Cat. 178**

*Obv.*: As 177 but head bare l.

*Rev.*: As 177.

Stockholm

A2101 P2002

**Cat. 179**

*Obv.*: As 177 but head laur. r.

*Rev.*: As 177.

Blackburn

A2002 P2003

PLATE VI

Oslo

A2002 P2009

**Cat. 180**

*Obv.*: NERO CLAVD CAESAR AVG GERM PM TRP IMP PP

Head laur. r.

*Rev.*: No legend, SC or mark of value.

Front view of Macellum Magnum.

BM 196<sup>58</sup> 17.63 gm. A2201 P2101 PLATE VI

Wulzinger 17.80 gm. A2201 P2101

Mazzini 359 14.71 gm. A2201 P2101

Paris 17.00 gm. A2202 P2101

PLATE VI

Paris 18.15 gm. A2202 P2101

Cambridge 14.75 gm. A2202 P2101

<sup>58</sup> BMCRE I, pl. 43, 6.

**Cat. 181**

*Obv.*: NERO CLAVDIVS CAESAR AVG GERM PM TRP IMP PP  
Head rad. r.

*Rev.*: As 177.

Oxford	20.42 gm.	A2003	P2004	PLATE VI
Hague	17.30 gm.	A2003	P2004	

**Cat. 182**

*Obv.*: NERO CLAVDIVS CAESAR AVG GERM PM TRP IMP P  
Head rad. l.

*Rev.*: As 177.

Stockholm		A2004	P2005	
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**Cat. 183**

*Obv.*: NERO CLAVD CAESAR AVG GERM PM TRP IMP PP  
Head rad. l.

*Rev.*: SECVRITAS AVGVSTI No SC or mark of value.

Securitas std. r. on throne, l. holding sceptre, r. elbow resting on back of throne.

Vienna	15.53 gm.	A2301	P2201	PLATE VI
Copenhagen	16.00 gm.	A2301	P2201	
Oxford	14.66 gm.	A2301	P2201	

**Cat. 184**

*Obv.*: NERO CLAVD CAESAR AVG GERM PM TRP IMP P  
Head rad. r.

*Rev.*: As 180.

BM 197 <sup>59</sup>	14.68 gm.	A2203	P2102	PLATE VI
Rome, Terme	15.70 gm.	A2203	P2102	
Copenhagen	16.04 gm.	A2204	P2102	PLATE VI
ANS	15.74 gm.	A2204	P2102	
Budapest		A2204	P2102	
Budapest		A2204	P2102	
Prince W. I, 201		A2204	P2102	

<sup>59</sup> *BMCRE* I, pl. 43, 7.

**Cat. 185***Obv.*: As 184.*Rev.*: As 177.

BM 221 <sup>60</sup>	17.12 gm.	A2201	P2006	PLATE VII
Florence	17.09 gm.	A2201	P2007	
Oxford	16.92 gm.	A2201	P2007	
Glasgow 64 <sup>61</sup>	14.69 gm.	A2201	P2007	

**Cat. 186***Obv.*: NERO CLAVD CAESAR AVG GER PM TRP IMP PP

Head rad. r.

*Rev.*: As 180.

Paris <sup>62</sup>	20.25 gm.	A2601	P2103	
Rome, Terme	16.11 gm.	A2601	P2103	PLATE VII

**Cat. 187***Obv.*: As 186.*Rev.*: As 183.

Cambridge	15.14 gm.	A2602	P2202	PLATE VII
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**Cat. 188***Obv.*: As 186.*Rev.*: As 177.

Rome, Terme		A2601	P2008	PLATE VII
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There is no evidence from site finds to establish the areas in which the dupondii without SC circulated, but their affinities of type and style clearly show that they were the product of the mint of Rome.

The VICTORIA AVGVSTI type shows victory flying left (with no indication of a ground line) holding a wreath and a palm and with her right leg well forward and clear of her drapery.<sup>63</sup> This is the representation of victory to left which was invariably used in the normal SC dupondius series at Rome.<sup>64</sup> The Lugdunum type was

<sup>60</sup> *BMCRE* I, pl. 44, 3.<sup>61</sup> *RIC Hunter* I, pl. 22, 64.<sup>62</sup> Gnechi, *Medaglioni*, pl. 142, 4.<sup>63</sup> PLATE VI, 181.<sup>64</sup> PLATE VII, 205.

quite distinct. It showed victory walking (always showing a ground line) with her left leg straight in a line with her body and her drapery billowing backward shrouding her right leg in its folds.<sup>65</sup>

SECVRITAS AVGVSTI is represented in two distinct ways on the dupondii without SC. Sometimes she is fully draped in a thin chiton, the presence of which can easily be seen, even on worn specimens, by the folds of its overlap.<sup>66</sup> On others she is shown naked to the waist, round which her garments are drawn in heavy folds.<sup>67</sup> Both representations were used on SC dupondii at Rome,<sup>68</sup> but only the first was employed at Lugdunum.

On the anepigraphic Macellum dupondii the steps are always shown inside a regular rectangular encasement, and the steps themselves are flanked at each side by an unmistakable baluster.<sup>69</sup> In slightly varied forms this was the regular representation of the steps at Rome.<sup>70</sup> At Lugdunum, however, the encasement of the steps became formalized into a quasi-triangular representation narrowing at the top.<sup>71</sup> The position of the balusters was still indicated, but the engravers seem to have lost all clear idea of their function.

On the dupondii without SC seven of the ten obverse dies show Nero's head radiate. In the main SC series Rome always employed the radiate and Lugdunum the laureate head. The three exceptional dies on dupondii without SC with the bare and laureate heads have no Lugdunum affinities. Their obverse legends NERO CLAVDIVS CAESAR AVG GERM PM TR P IMP PP and NERO CLAVD CAESAR AVG GERM PM TR P IMP PP belong exclusively to Rome, and their bust truncation was quite distinct from the characteristic Lugdunum form.

The portraits on the dupondii without SC are the youngest ones on that denomination under Nero. They all show Nero's hair "in gradus formata" along the whole line of his forehead and must be

<sup>65</sup> PLATE XV, 495.

<sup>66</sup> PLATE VI, 183.

<sup>67</sup> PLATE VII, 187.

<sup>68</sup> PLATE VII, 198.

<sup>69</sup> PLATE VI, 180.

<sup>70</sup> PLATE VIII, 207.

<sup>71</sup> PLATE XIV, 490, 493.

placed about the period of the aurei and denarii dated TRP VIII and X. But the arch of Nero's front hair is not fully developed into the forward curve of most of the portraits in the main SC series.<sup>72</sup> The two laureate heads retain a zonal treatment of the hair similar to that on the copper asses without SC; the bare head has many points in common with that issue; and the radiate heads are generally close to the portraits on the sestertii without SC. On all the obverse dies there are distinct traces of the lingering influence of the old bust truncation of the dated aurei and denarii.<sup>73</sup>

The metal in every case seems to be the normal orichalcum, which was used for the main SC dupondius series, and spectrographic analysis has confirmed this for the pieces in the British Museum. Their weights cover a very large range and are rather erratic. Two examples in Oxford and Paris weigh more than 20 gm. A frequency table shows that the general weight range of these dupondii without SC is virtually the same as that of the Claudian SC dupondii, but slightly higher than the earliest group of Nero's dupondii with SC and the mark of value  $\bar{\Pi}$ . There is, however, a considerable overlap, and the weights of the dupondii without SC do not remove them into a category apart.<sup>74</sup>

The weight range of the later dupondii with SC alone is slightly lower again than that of dupondii with SC and the mark of value  $\bar{\Pi}$ . There is evidence of a rise in the value of orichalcum in these years, and during the issue of orichalcum asses there was a marked lowering of the weight standard, later portraits always occurring on asses of lower weight. The natural explanation of the slightly higher weight range of the dupondii without SC, is that they are slightly earlier than the main Roman issue with SC and the mark of value  $\bar{\Pi}$ . Mattingly's figure of 18.46 gm. (284.86 grains) as the average weight of 5 dupondii without SC seems to be an unfortunate misprint.<sup>75</sup> His average is considerably higher than the individual weights of any of the five coins which he can have used. The average of the three pieces described in the Catalogue is 16.47 gm.; and if we

<sup>72</sup> PLATE XIV, 490ff.

<sup>73</sup> PLATE I, 19-20.

<sup>74</sup> See table of dupondius weights Appendix II, Table 5.

<sup>75</sup> *BMCRE* I, p. iv.

include two dupondii without SC, whose weights are recorded in the British Museum's cast collection, the average comes to 16.21 gm. (250.2 grains).

Equally significant are the reverse types. Dupondii without SC never have the praenomen *imperator*<sup>76</sup> themselves, nor are the same types subsequently used in an SC series with the praenomen. This is further evidence that these types are indeed the early dupondius types of the mint of Rome, and reinforces the evidence of portraiture and weight that the dupondii without SC preceded the main issue.

#### ORICHALCUM ASSES WITHOUT SC

Closely associated with the other orichalcum denominations without SC are the orichalcum asses without SC:

#### Cat. 257

*Obv.*: NERO CLAVDIVS CAESAR AVG GERMANICVS

Head laur. r.

*Rev.*: PONTIF MAX TR POT IMP PP No SC or mark of value.  
Nero laur. advancing r. in the flowing robes of Apollo citharoedus, l. hand holding a lyre and r. playing it.

Vienna	9.50 gm.	A341	P341	
Paris	9.07 gm.	A341	P341	
Oxford	8.86 gm.	A341	P341	
Stockholm		A341	P341	
Copenhagen	8.94 gm.	A342	P344	PLATE IX
Cambridge	8.50 gm.	A342	P341	PLATE X
Rome, Terme	9.62 gm.	A342	P342	
Vienna	8.50 gm.	A342	P342	PLATE X
Copenhagen	10.28 gm.	A342	P342	
Bahrfeldt 513	9.63 gm.	A342	P342	
Paris	8.30 gm.	A342	P343	
Helbing 17, 447		A342	P343	
Glasgow 77	9.30 gm.	A342	P345	

<sup>76</sup> The praenomen was assumed during TRP XII (A.D. 66/67) and regularly used thereafter by Nero; see pp. 4-7.

**Cat. 258***Obv.*: As 257.*Rev.*: GENIO AVGVSTI No SC or mark of value.

Genius standing l.; l. holding cornucopiae, r. patera.

Vienna 9.50 gm. A342 P346 PLATE X

**Cat. 259***Obv.*: NERO CLAVDIVS CAESAR AVG GERMANICVS

Head rad. r.

*Rev.*: As 257.

Madrid A346 P353

**Cat. 260***Obv.*: NERO CLAVD CAESAR AVG GERMANIC

Head rad. r.

*Rev.*: As 257.

BM 257 9.07 gm. A343 P347

Paris 8.63 gm. A343 P347

Vierordt 875 A343 P347

Oxford 8.73 gm. A343 P348

Vienna 8.60 gm. A343 P348

Copenhagen 8.51 gm. A343 P348

PLATE X

**Cat. 261***Obv.*: NERO CLAVD CAESAR AVG GERM PM TRP IMP PP

Head rad. r.

*Rev.*: As 258.Glasgow 65<sup>77</sup> 8.58 gm. A344 P349

Milan 8.60 gm. A344 P349

Warsaw 8.55 gm. A344 P349

Naples A344 P349

Morcom 2102 A344 P349

Vienna 8.75 gm. A345 P350

Vienna 8.75 gm. A345 P350

Vatican 7.10 gm. A345 P350

BM 8.41 gm. A345 P350

PLATE X

<sup>77</sup> RIC *Hunter* I, pl. 22, 65.



Florence	8.55 gm.	A345	P351
Oxford	8.33 gm.	A345	P351
Copenhagen	8.42 gm.	A345	P351
BM	8.27 gm.	A345	P351
Gotha		A345	P351
Budapest		A345	P352
York		A345	P352

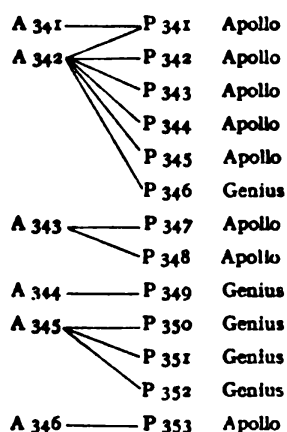


FIG. 2. ORICHALCUM ASSES WITHOUT SC  
ROME ISSUE II

The laureate head asses without SC<sup>78</sup> constitute a closely die-linked group. The radiate head asses without SC<sup>79</sup> are not linked with this group but seem to be associated closely with it. As a group, the orichalcum asses without SC follow the copper asses without SC and precede the main issue of orichalcum asses with SC and the mark of value T. The stage of their development is shown by the advance in treatment between A341 and A342, two die-linked obverse dies. A341 still shows Nero's hair in strong rope-like strands as on some of the copper asses without SC. But A342,<sup>80</sup> while not much more developed in age, heralds the new approach of the main *aes* series<sup>81</sup> in its careful rendering of Nero's curls.

<sup>78</sup> PLATE X, 257-58.

<sup>79</sup> PLATE X, 260, 261.

<sup>80</sup> PLATE X, 257.

<sup>81</sup> PLATE X, 262, 267.

During the course of the main series of orichalcum asses with SC and T there was a reduction in the weight standard of the denomination, and coins of lower weight are invariably found with the later portraits. Plotted against the weights of the main series, the orichalcum asses without SC are all comparatively high, and must belong to the period before the weight standard was reduced.<sup>82</sup> As with the other denominations, the combined evidence of portraiture and weight suggests clearly that the orichalcum asses without SC preceded the main series.

It is interesting to note that the group without SC seems to be quite separate from the main issue with SC and T; and no die links have yet been noted between the two groups. Quite a number of coins, however, were struck without SC,<sup>83</sup> and some obverse dies remained in use after the development of a die flaw. The flaw in A343 can be seen clearly on the example in Copenhagen and at a later stage on the coins in the BM, Paris and Vienna.<sup>84</sup> The flaw which can be seen on the coins in Milan and Glasgow struck from A344 had deteriorated further before the coin in Naples was struck from the same obverse die.

# ORICHALCUM QUADRANTES WITHOUT SC

The rare quadrantes in orichalcum without SC and without any mark of value should also be attributed to this second group:

## Cat. 338

*Obv.*: NERO CLAV CAESAR AVG GER

Helmet placed r. on column; against the cippus rests a round shield; behind, spear slanting upward to r.

*Rev.*: PON M TRP IMP PP

Laurel branch.

Vatican	2.35 gm.	A511	P511
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Manchester	1.68 gm.	A511	P511
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Vienna	2.12 gm.	A512	P511	PLATE XII
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<sup>82</sup> See Appendix II, Table 7, table of orichalcum as weights.

<sup>83</sup> Altogether 5 obverse and 12 reverse dies have been noted.

<sup>84</sup> PLATE X, 260.

**Cat. 339**

*Obv.*: As 338 but legend NERO CLA CAE AVG GERM

*Rev.*: As 338 but legend PM TR P IMP PP

BM 293                      2.27 gm.    A5I3    P5I2

**Cat. 340**

*Obv.*: As 338 but legend NERO CLA CAE AVG GER

*Rev.*: As 339.

BM 292                      2.02 gm.    A5I4    P5I3

**Cat. 340a**

*Obv.*: Nero-Owl NERO CL CAE AVG GER

*Rev.*: As 339.

ANS

## SIGNIFICANCE OF THE OMISSION OF SC

Various explanations have been offered for Nero's *aes* without SC. Gneecchi regarded them as medallions; Grant has called them fore-runners of medallions; and Mattingly and Sydenham have suggested that some are patterns for the Lugdunum mint, while some may have been used as presentation pieces by the Emperor. Each of these suggestions, however, gives rise to serious difficulties.

Gneecchi's<sup>85</sup> view is: 1) the pieces can be distinguished from the senatorial issues only by the lack of SC; 2) the omission of SC shows them to be products of the imperial mint; 3) in this respect they are prototypes of imperial medallions<sup>86</sup> and were given to the people on the occasion of congiaria, feasts, games, etc.

Gneecchi started from the assumption that the mint was basically divided into a senatorial officina issuing bronze and an imperial one which issued gold and silver; and his description of the *aes* without SC as "imperial" presupposes the old dyarchic constitutional theory, which the researches of recent historians have done much to undermine.<sup>87</sup> Gneecchi's suggestion that the coins without SC were given

<sup>85</sup> Gneecchi, *Medaglioni*, pp. xxxii ff.

<sup>86</sup> Gneecchi, *Medaglioni* p. xxxiii defines medallions as "i pezzi scelti in ogn; metallo emissi all'infuori o al disopra semplice ed ordinaria monetazione."

<sup>87</sup> Cf. H. Stuart Jones, *Cambridge Ancient History* X, 5.

to the people on the occasion of *congiaria*, feasts and games is extremely interesting, but he adduced no evidence from ancient authorities to support his suggestion. We know that *donatives* were given, but we have no evidence that *aes* without SC was given on these occasions. Indeed other considerations make it most unlikely that this was its purpose under Nero. Coins without SC are found in all denominations down to *semissis* and *quadrantes*. It is difficult to see the point of presentation *farthings*! Although *aes* was issued at Rome for the last four years of Nero, all the coins without SC belong to the beginning of that period. Were the presentations then confined to a single year? The only *congiarium* of Nero mentioned by the ancient authors was in A.D. 57,<sup>88</sup> long before Nero began to issue *aes* either with or without SC.

Grant<sup>89</sup> has modified this view to avoid some of Gnechi's worst difficulties. While he only discusses the *dupondii* in detail, he apparently intends his explanation to cover all the denominations of Nero without SC. He claims that these *dupondii* are distinguished from the ordinary series by other features than the mere omission of SC: 1) they are extremely rare, "Such *aes* issues apart from the omission of SC are usually identical in type, and (as analysis has now shown) alloy, with further *aes* pieces which were clearly issued in millions [*sic*]. Thus *dupondii* with the present type [VICTORIA AVGVSTI] and SC are very common indeed, and must have been issued in enormous quantities (at more than one mint), . . . whereas the coin illustrated here [VICTORIA AVGVSTI] without SC is of considerable rarity;" 2) the weights of pieces without SC are considerably higher. Grant quotes the average weight of *dupondii* at Rome omitting SC as nearly 285 grains while his estimated standard for the SC pieces is 236 grains. "This difference cannot by any means be accounted for by the comparative absence of wear of these restricted issues, for that factor does not, in this denomination, make a difference of more than 12 to 14 grains;" 3) "they

<sup>88</sup> Tacitus, *Annals* xiii 31; Suetonius, *Nero* 10; cf. Denis van Berchem *Les distributions de blé et d'argent à la plèbe romaine sous l'empire* (Geneva, 1939), pp. 148-49.

<sup>89</sup> M. Grant, *Roman Imperial Money* (London, 1954), pp. 111 ff., from which the quotations in this section are taken. Cf. J. M. C. Toynbee, *Roman Medallions*, NS 5 (New York, 1944), pp. 15-16.

show a superiority, or at any rate a distinctiveness, of portraiture and of style."

These unorthodox features, Grant claims, justify the description of "pre-medallions"—a term which he applies to other coins of limited circulation. Finally he suggests an occasion for their issue which avoids the difficulties to which Gnecci's view gave rise, by connecting them with the decennalia of Nero and the fiftieth anniversary of the death of Augustus.

Grant's account of the additional features which distinguish the dupondii without SC is, however, open to serious objections. Dupondii without SC are undoubtedly rare, but Grant overstates their rarity in comparison with dupondii of the same type with SC. The dupondii without SC were struck at Rome, and their rarity should be compared with that of other issues at Rome of the same types with SC. In the major accessible public collections from which my material is drawn, I have counted five reverse dies of the VICTORIA AVGVSTI type without SC and 29 dies of the same type with SC. In any case should we regard rarity as our criterion for a medallic issue?

Grant's strongest argument should be the completely different weight standard which he claims for the dupondii without SC. But his figures are based on those given by Mattingly which, are at least 34 grains too high—the result, apparently, of a misprint.<sup>90</sup> As has been indicated, the weight range of Nero's dupondii without SC is virtually the same as that of the pieces of Claudius, and only slightly higher than the earliest group of Neronian dupondii with SC and the mark of value  $\overline{\text{II}}$ . There is in fact a considerable overlap; their weights do not remove the dupondii without SC into a category apart; and the slight difference merely indicates a slightly earlier date for their issue.

Grant's third distinctive feature is "a superiority, or at any rate a distinctiveness, of portraiture and of style." But equally fine portraits of equally fine style can be seen in many coins of the main dupondius series with SC, and thus style here is not in itself a sufficient criterion. There is indeed a distinctiveness about some of the portraits, but this is probably due to the slightly earlier and experimental nature of the pieces.

<sup>90</sup> See above p. 59.

The only differentiating features, then, which it seems can legitimately be ascribed to the dupondii without SC are a comparative rarity, a slightly higher weight range than the normal dupondii, and a certain distinctiveness in portraiture. Only the last two represent an advance on Gneecchi's position, and they hardly justify more than the assertion that the coins are slightly earlier than the main series with SC. It is still possible to assert, as Gneecchi did, that they are precursors of medallions, but the only reason that can legitimately be offered is that they lack SC.

Mattingly has suggested of these coins without SC, that "some of them were patterns for the Lugdunum mint, some possibly presents for the Emperor's friends, some are due to the account of modern improvers of coins."<sup>91</sup> The last group has been rigorously excluded; the difficulties in regarding any of the coins as presentation pieces have been discussed above; and an analysis of the *aes* without SC leaves little ground for supposing that any of them was used as a pattern by the reconstituted Lugdunum mint.

The principal forms of legend on the *aes* without SC were used exclusively at the mint of Rome. The forms: NERO CLAUDIVS CAESAR AVG GERM PM TRP IMP PP and NERO CLAVD CAESAR AVG GERM PM TRP IMP PP used on sestertii and dupondii without SC were also used in the main series with SC at Rome, but never at Lugdunum. Only the comparatively rare form NERO CLAVD CAESAR AVG GER PM TRP IMP PP was used on sestertii and dupondii in the series with SC at both Rome and Lugdunum.

The copper asses and semisses without SC show Nero's head bare, as do the copper asses and semisses at Lugdunum, whereas the Roman copper asses with SC always have Nero's head laureate; but the first Lugdunum issue of asses copied a Roman orichalcum As with SC and the mark of value, and the first Lugdunum issue of semisses copied an ordinary Roman orichalcum semis. Moreover the Apollo and Genius copper asses without SC demonstrably circulated in Rome and Italy and the series is known from more than thirty obverse and as many reverse dies.

The characteristic forms of reverse type on the *aes* without SC were all subsequently used in the series with SC at Rome, but some

<sup>91</sup> *BMCRE* I, Intro., p. 1.

of them were never employed at Lugdunum; and even when Lugdunum used a reverse type that had previously been used in the issue without SC, it seems rather to have copied its representation from the later Roman coins with SC, e.g., one representation of the Decursio type (with Nero riding right preceded and followed by a foot soldier) was issued at Rome both with and without SC (PLATE II, 74; III, 78) but never at Lugdunum, and the Lugdunum form of the Macellum type (PLATE XIV, 490, 493; XVI, 501) always had the legend MAC AVG, whereas that of the issue without SC was anepigraphic (PLATE VI, 180, 184; VII, 186).

As both the groups of *aes* without SC preceded the main *aes* issues at Rome and were thoroughly Roman in type and content, they might possibly be regarded as patterns for the mint of Rome. The evidence of finds, however, and the state of wear of many examples without SC make it abundantly clear that the coins without SC did in fact circulate. It is, of course, possible for patterns to slip into circulation; but each of Nero's types without SC is known from several dies, the copper asses without SC are known from more than thirty obverse dies, and some of the obverse dies in the second group without SC remained in use after the development of die flaws. All this distinctly suggests that the two groups of *aes* without SC constituted two small issues.

The explanations of Gneecchi, Grant and Mattingly are all based on the assumption that S(enatus) C(onsulto) means "struck by order of the Senate" and seek to explain how Nero's *aes* without SC could have been struck without this authorization. But in a recent study Kraft<sup>93</sup> has questioned the validity of this assumption. He notes that by the 60's B.C. there was a clear and specific relation between SC and the type of the coins on which SC is found, that there was a personalized application of these new principles in Octavian's favor. He asks why SC is found regularly on the *aes* of the Augustan moneyers but not on their gold and silver, unless SC refers specifically to the type content of the *aes*. He analyzes the few issues of *aes* of the Julio-Claudians that lack SC, such as the SPQR OB CIVES SERVATOS SPQR MEMORIAE AGRIPPINAE and EXSC corona civica

<sup>93</sup> Konrad Kraft, "S(enatus) C(onsulto)," *JNG* 1952, pp. 7-49.

types and notes that most of them specifically illustrate and define honors conferred publicly on the imperial house or are presentation types. Kraft argues that such an absence of SC indicates that the origin of the formula on the *aes* lay in the honors with which it was associated, not in the authorization as such of the coinage; and he concludes that SC means "honour in the form of the corona civica, etc., bestowed on the Emperor by decree of the Senate."

Kraft's arguments seem to be heavily supported for the Augustan period by Sutherland's further study of the symbolism of the *aes* coinages of Augustus.<sup>93</sup> The CA issues of Asia, the SC issues of Antioch, the Altar issues of Lugdunum, and the issues of several city coinages in Spain are shown to have had one major and consistent purpose—the duty of recalling the supreme honors paid to Augustus after Actium, and in each case the honors are accompanied by a reference to the agency authorizing the honors shown. On the other hand, Aase Bay reminds us that we should also consider constitutional and administrative practice. She points out that the letters SC under Augustus and the *aes* of the reopened mint of Rome with the coin reform of Augustus introducing orichalcum go together. In this context she sees SC as something to vouch for the legality of the new experimental currency — the guarantee and authorization for the new issue.<sup>94</sup>

It is particularly difficult to accept Kraft's thesis for the varied reverse types of the later Julio-Claudian coinages. During this period, some reverse types have a specifically senatorial reference relating to the type such as DIVO AVGVSTO SPQR on the sestertii of Tiberius, EX SC OB CIVES SERVATOS with the corona civica on aurei, denarii and sestertii of Claudius, and EXSC with the corona civica on the pre-reform aurei and denarii of Nero. But otherwise the *aes* denominations normally had the senatorial reference whatever their reverse types might be; and the gold and silver never had the senatorial references SC even when it used the same types as the *aes*. Under Claudius, for example, CONSTANTIAE AVGVSTI is used as a type on all three metals, but only the *aes* uses the type with SC. Again in

<sup>93</sup> C. H. V. Sutherland, "The Symbolism of the Early *Aes* Coinages under Augustus," *RN* 1965, pp. 94–109.

<sup>94</sup> Aase Bay, "The Letters SC on Augustan *Aes* Coinage," *JRS* 1972, pp. 111–22.



Nero's post-reform coinages, the seated Roma and Janus temple types are used on all three metals, but only the *aes* denominations use the types with SC.<sup>95</sup> In this important respect the *aes* denominations are differentiated sharply from the gold and silver. If there is no other senatorial reference arising out of the type, the *aes* denominations deliberately introduce a reference to the Senate in the form of SC.

The notable exception is the *aes* of Nero without SC. The reverse types of these issues: Adlocutio, Annona, Congiarium and Decursio on the sestertii; Macellum, Securitas and Victoria on the dupondii; Apollo and Genius on the asses; Roma and the Table on the semisses omit SC in Issues I and II at Rome, but use it in Issues III and IV. By this stage SC can hardly refer to the type alone. Otherwise it should be found equally on all *aes* issues with the same types.

We can therefore accept Kraft's view about the original significance of SC under Augustus but we must equally accept Mattingly's correction<sup>96</sup> of Kraft—that there was subsequently a change of use and the original reference of the SC may itself have been ambiguous. There is still a "concordia" of emperor and senate, but it is not only the general concordia expressed by the grant of the civic oak, but a more special concordia concerned with the issue of token coinage.

This does not however mean a return to the old view that SC appears by right, and is proof of the Senate's authority to issue *aes* at Rome.<sup>97</sup> Quite apart from Kraft's objections, there are several other indications that the senatorial reference on the *aes* was one of courtesy alone, and not of specific right. Perhaps the most significant is the fact that under Nero at least if not previously, the *aes* seems to have been struck in officinae that were at other times engaged in the production of gold and silver.<sup>98</sup> The imperial character of the *aes* with SC is underlined in other ways. On the restored *aes*

<sup>95</sup> *RIC* Claudius, 1–7 for the aurei and denarii; 68 for the asses. See *Cat.* 25 f. (aurei), 56 f. (denarii), 129 ff. (sestertii), 196 ff. (dupondii).

<sup>96</sup> *NC* 1963, pp. 255–56.

<sup>97</sup> As in Mattingly's earlier view, in *BMCRE* I, p. xvi "the control was certainly given to the Senate as witness its imposing mark of authority SC."

<sup>98</sup> See Chapter 8.

of Titus and Domitian<sup>99</sup> the formula always referred directly to the act of the Emperor in restoring the pieces though SC was generally appended. Many validating countermarks were decidedly imperial:<sup>100</sup> AVG; IMP; IMP AVG; TIB; NCAPR; ΓΑΛΒΑ; the Caesar and Vespasian monograms, etc. Countermarks quoting the Senate's authority were confined to SPQR and SPR in the context of the Civil War propaganda. A specifically imperial reference in a coin type like Caligula's ADLOCVT COH<sup>101</sup> or Titus' ANNONA AVG<sup>102</sup> warranted the complete omission of any reference to the Senate, although the pieces clearly belonged to the same mint as the rest of the *aes*. The reverse type of SC inside a wreath is regularly used on the *aes* issues of Antioch on the Orontes<sup>103</sup> in the chief imperial province of the east, and its reference must still be to the Roman Senate. Nero's western *aes* struck in an imperial province at Lugdunum was always marked SC,<sup>104</sup> and so too were the issues of Galba in Spain and Gaul. In fact the Senate's role can hardly have exceeded the complimentary form.<sup>105</sup>

The prominence given to SC certainly decreased markedly during the Julio-Claudian period. Whereas the Augustan moneyers used the letters as a distinct type, around which they set their names, Tiberius often substituted another reverse type and relegated SC

<sup>99</sup> *BMCRE* II, pp. 281 ff. A common form of legend is IMP T VESP AVG REST SC.

<sup>100</sup> *BMCRE* I, pp. xxxviii–xliii.

<sup>101</sup> *BMCRE* I Caligula, 33 ff. Other than the pattern type Numa head *asses* of Augustus (*BMCRE* I 28), these sestertii of Gaius were the only *aes* before Nero that omitted all reference to the Senate. They are not different in style from the normal sestertii of Caligula with SC and must be the products of the same mint at Rome. Mattingly certainly seems to be correct in connecting them with the events described by Dio 59.2 when Caligula paid in full the 1,000 sestertii bequeathed to each praetorian under Tiberius' will and added the same sum again in his own name, distributing the money at a special parade. But the coins must commemorate the event and not have been presented at it. There is no reason to suppose that the issue was of the enormous size that 1,000 sestertii per praetorian would have required, and the issue was not confined to the year of the donative, as there are examples dated TRPOT, TRP III and TRP IIII PP.

<sup>102</sup> *BMCRE* II Titus, 152 ff.

<sup>103</sup> W. Wruck, *Die syrische Provinzialprägung*, pp. 34–35.

<sup>104</sup> Cf. Sutherland, *Coinage in Roman Imperial Policy*, p. 165.

<sup>105</sup> Cf. H. Mattingly *Roman Coins* (London, 1928), p. 114.

to a comparatively unimportant place in the field. Under Nero and later emperors SC found a place only in the reverse field, and by the second century the letters became noticeably diminished in size. The whole process is undoubtedly symptomatic of the declining importance of the Senate.

Nero's *aes* without SC was the first *aes* to be struck at Rome for more than a decade, and this in itself would greatly facilitate any change in type and reference. The omission of SC from his first two issues in A.D. 63/64, shortly before he dropped the complimentary EXSC from the gold and silver and at a time when his relations with the senate had become considerably strained should, I believe, be regarded as a deliberate and calculated attempt to abandon a complimentary formula the reality of which had disappeared and the importance of which had considerably waned.

On Nero's gold and silver there is a comparable development. The issues of A.D. 54/55 to 59/60 have the type of the corona civica and the senatorial reference EXSC (PLATE I, 2, 4, 10). The formula continues when the types are changed to Ceres, Roma and Virtus in A.D. 60/61 (PLATE I, 11-14, 19, 20) but it is ultimately dropped in the reformed issues from A.D. 64 onward (PLATE I, 22 ff.). Kraft refers EXSC to the type, the corona civica, and when the type is changed he regards the continued use of EXSC as a "vestigial organ." Mattingly inverts the argument and suggests that EXSC cannot refer only to the corona civica because of its persistence when the new types were introduced. He sees a deliberate ambiguity suggesting "civilitas"—that the Senate had some part in the dated gold and silver issues. The distinction is a fine one, but the point is clear. A senatorial reference derived in part from the type persists as a complimentary reference when the type is changed, and is ultimately dropped. It is dropped about the same time as the issues of Nero's earliest *aes*—the two issues that omit SC.

Issue I of Nero's *aes*, the first complete *aes* issue in a range of types to omit SC during the Julio-Claudian period, consisted of copper asses and semisses—denominations which were indistinguishable from those already in circulation, and in which the only innovation was the omission of the traditional senatorial reference. But Issue II, similarly without SC, made a drastic break with previous

monetary practice. Hitherto sestertii and dupondii alone had been struck in orichalcum but now for the first time a general orichalcum coinage was introduced for all the *aes* denominations. This was closely followed by Issue III which struck the same range of denominations in orichalcum with the same range of reverse types, but now had SC on all denominations and marks of value on the dupondii, asses, semisses and quadrantes. All the later issues of Nero's *aes* at both Rome and Lugdunum invariably included SC. The change in policy at this juncture, and the decision to include once more the traditional senatorial reference on the *aes* seems to be occasioned by a need to associate the Senate with the new and unfamiliar monetary system. It is probably no coincidence that SC was restored to Nero's *aes* in the same issue as the marks of value were introduced.



## 5. ISSUES OF AES AT ROME

### SEQUENCE OF THE ISSUES

The identification of the *aes* without *SC* as the first two issues of *aes* at Rome, in conjunction with the knowledge that Nero assumed *IMP* as a praenomen during A.D. 66 provides the key for the arrangement of the issues of the *aes* at Rome.<sup>1</sup> Six principal stages can be distinguished, and each can be set in order in a progressive sequence. Each succeeding stage retains many features from the preceding issue, but is distinguishable from it by some major change or innovation.

**Issue I** consists of the copper asses, semisses and quadrantes without *SC*.

**Issue II** introduces the general orichalcum coinage of sestertii, dupondii asses and quadrantes—all without *SC*.

**Issue III** is a continuation of the general orichalcum coinage, but is distinguished by the addition of *SC* to all denominations and marks of value to the dupondii, asses, semisses and quadrantes.

**Issue IV** still has *IMP* as a cognomen, but is marked by its return to the more customary pattern of denominations with sestertii and dupondii in orichalcum, asses and quadrantes in copper, all without marks of value.

**Issue V** has sestertii and dupondii in orichalcum, and asses in copper with the same reverse types as in Issue IV, but is distinguished from that issue by the use of *IMP* as a praenomen.

**Issue VI** has the same range of denominations, but is distinguished by the use of the date *TRP XIII* on the sestertii and dupondii and by the use of a distinctive obverse legend on the copper asses.

<sup>1</sup> The complete list of varieties (with an indication of the substantive varieties in each issue) for all denominations will be found in the catalogue below.

Within each of these six *aes* issues and their principal subdivisions there are several minor variations in the form of obverse legend. Some elements in the titulature are abbreviated in different ways in the same issue, e.g., Germanicus is abbreviated to both GERM and GER, and Claudius is either given in full as CLAVDIVS or shortened to CLAVD. These minor differences often seem to have no special chronological significance for the sequence in which obverse dies were used within each issue but some forms at least seem to occur principally in one part of an issue, and to constitute the predominant form of obverse legend in use for a time. These minor differences may have been produced by individual engravers faced with the task of fitting a set legend neatly into a limited space. Alternatively, in some cases at least, the engravers may have received successive sets of instructions about the minutiae of the forms of abbreviation to be followed. The mint, however, certainly continued to use without discrimination all its available obverse dies, even though they may have had earlier forms of obverse legend, until there was a major change in the form of the emperor's obverse titulature.

#### SESTERTII

**Issue II** was the first to include sestertii—those without SC. The principal reverse types were Adlocutio, Annona, Congiarium and Decursio. The three forms of obverse legend:

NERO CLAVDIVS CAESAR AVG GERM PM TRP IMP PP;

NERO CLAVD CAESAR AVG GERM PM TRP IMP PP

and less commonly

NERO CLAVD CAESAR AVG GER PM TRP IMP PP

do not seem to have had any special chronological significance.

*Cat.* 70–83. PLATES II–III.

**Issue III** had the reverse types of the second issue, now with SC, and some additional types with SC of the Arch, Ostia harbor and a new Decursio. In other denominations Issue III is defined by the use of marks of value. These sestertii had no marks of value, but the issue is defined by the parallel issue of dupondii, which closely reflects changes in the sestertii during Issues IV, V and

VI. At the point where the dupondii drop the mark of value  $\bar{\Pi}$ , they change their reverse type and introduce Roma and Janus temple; and there can be little doubt that the introduction of Roma and Janus temple instead of the earlier sestertius types marks the beginning of Issue IV.

NERO CLAVD CAESAR AVG GER PM TRP IMP PP was the most common form and must have been used throughout Issue III. It is occasionally found in Issue II and was still the predominant form in Issue IV. NERO CLAVDIVS CAESAR AVG GERM PM TRP IMP PP and NERO CLAVD CAESAR AVG GERM PM TRP IMP PP seem to be early varieties as they were the usual forms in Issue II but never occur after Issue III. NERO CLAVDIVS CAESAR AVG GER PM TRP IMP PP on the other hand seems to be a later variant which at one time became the predominant form. It was never used on the sestertii without SC but was used extensively in this issue and is occasionally found with Roma and Janus temple sestertii of Issue IV also.

*Cat.* 84–134. PLATES III–IV.

**Issue IV** had the reverse types of Roma and Janus temple instead of the previous wide range. Nero still had the cognominal IMP. The normal obverse legend was NERO CLAVD CAESAR AVG GER PM TRP IMP PP, with NERO CLAVDIVS CAESAR AVG GER PM TRP PP as a rare variant. The two views of the temple of Janus described in the catalogues as “door closed left” and “door closed right” were used throughout this issue but seem to have no special chronological significance. In fact they merely represent two different aspects of the same building.<sup>2</sup> Two forms of the Roma reverse type also were used throughout Issue IV. One showed Roma seated left holding a victory in her right hand and a parazonium in her left; the other showed her with a victory in her right hand but holding a spear upright in her left. The extremely rare sestertii with the cuirassed bust of Nero and the legend NERO CAESAR AVG IMP TR POT XI PPP were all struck from a single obverse die.<sup>3</sup> Nero’s

<sup>2</sup> See p. 129 below.

<sup>3</sup> I have made a further study of these coins in a forthcoming article “The Aes of Nero with Tribunician Dates.”



head is comparatively early; the obverse date falls in the year December A.D. 64/65; and the coins should certainly be placed at or near the beginning of Issue IV. It is fairly clear that soon after the sestertius reverse types were changed, a new obverse type was also contemplated; but only one obverse die was cut and put into use before the project was abandoned.

*Cat.* 135–154. PLATE IV.

**Issue V** had a changed obverse legend, which now included IMP as a praenomen. The usual obverse legend was IMP NERO CLAVD CAESAR AVG GER PM TR P PP with the rarer variant IMP NERO CLAVDIVS CAESAR AVG GER PM TRP PP. The two views of the temple of Janus and the two forms of the Roma reverse type were retained unchanged from the fourth issue.

*Cat.* 155–166. PLATES IV–V.

**Issue VI** had a new legend with the tribunician date IMP NERO CLAVD CAESAR AVG GERM PM TRP XIII PP. Some coins retained the reverse type of Roma holding victory r. and spear l. from Issue V, but most coins in this issue had modified and different versions of both the Roma and Janus temple type.

*Cat.* 167–174. PLATE V.

The latest issue of sestertii, never issued in any numbers and with no substantive varieties, seems to have consisted of the rare coins dated TRP XIV, with the reverse types of Roma shield l. that had been used in Issue VI and of Victory l. holding a statuette of Minerva and a palm branch, derived from the same image as the reverse of the first Roman sestertii of Galba.<sup>4</sup>

*Cat.* 175, 176.

#### DUPONDII

**Issue II** was the first to include dupondii. These dupondii without SC had bare and laureate heads besides the radiate form that subsequently became the regular representation on the denomination at Rome. Five forms of obverse legend were used:

<sup>4</sup> *Ibid.*

NERO CLAVDIVS CAESAR AVG GERM PM TRP IMP PP;  
 NERO CLAVDIVS CAESAR AVG GERM PM TRP IMP P;  
 NERO CLAVD CAESAR AVG GERM PM TRP IMP PP;  
 NERO CLAVD CAESAR AVG GERM PM TRP IMP P;  
 NERO CLAVD CAESAR AVG GER PM TRP IMP PP

but no special chronological significance can be attached to these varieties.

*Cat.* 177–188. PLATES V–VII.

**Issue III** is distinguished by the addition of SC and the mark of value  $\bar{\Pi}$  on the reverse. The legend MAC AVG was added to the formerly anepigraphic Macellum type.

It continued to use the reverse types of Victoria l. and Securitas, and added the further type of Victoria r.

NERO CLAVD CAESAR AVG GER PM TRP IMP PP  
 was the usual form.

NERO CLAVDIVS CAESAR AVG GERM PM TRP IMP PP  
 and

NERO CLAVD CAESAR AVG GERM PM TRP IMP PP  
 were probably early variants, as they were often used in the series without SC but not after the new representation of Victoria flying right was introduced, nor with the later types of Roma and Janus temple. NERO CLAVDIVS CAESAR AVG GER PM TRP IMP PP seems to have been the predominant form in the middle period of the issue, and it was still used occasionally in Issue IV with the new Roma and Janus temple types.

*Cat.* 189–209. PLATES VII–VIII.

**Issue IV** is distinguished by the absence of the mark of value and a change of reverse types. The two new types of Roma and Janus temple, introduced at this stage, continue in one form or another up to the end of Nero's reign. As on the sestertii, the two views of the temple of Janus had no chronological significance. Initially the form used on the sestertii for both the Roma and Janus temple types was employed. To this early group at the beginning of the issue belong the rare dupondii with the laureate head (PLATE XXIII, 210–212). This experimental obverse for the dupondii at Rome is closely parallel to the transient use of the cuirassed bust

on sestertii at the beginning of Issue IV, and was as quickly abandoned.

Eventually the longer reverse legend PACE PR TERRA MARIQ PARTA IANVM CLVSIT was replaced by PACE PR VBIQ PARTA IANVM CLVSIT on the dupondii, and the type of Roma holding a victory and parazonium was replaced by the distinctive dupondius type of Roma holding a wreath. The earlier forms of both these types are never found with the praenominal IMP, whereas the later forms continued to be used in the subsequent issue after mid-A.D. 66. The usual obverse legend was NERO CLAVD CAESAR AVG GER PM TRP IMP PP with NERO CLAVDIVS CAESAR AVG GER PM TRP IMP PP as a rare variant.

The general argument for the sequence of the reverse type in this issue is reinforced by the evidence of the overstrike in Paris (PLATE XXII, p). A dupondius of this issue with the earlier Janus temple type that has the longer legend, is overstruck by the later Roma type with the wreath and parazonium.

*Cat. 210–227. PLATE VIII.*

**Issue V** had a changed obverse legend to incorporate the praenomen IMP. Toward the end of the issue there is a new version of the Roma type which had been used for some time previously on the sestertii—that of Roma seated left with a victory in her right hand, but holding a spear instead of the parazonium in her left. This variety shares an obverse die with the normal Roma type of Issue V. It usually has the obverse legend of that issue, IMP NERO CLAVD CAESAR AVG GER PM TRP PP but one specimen has been noted with the legend IMP NERO CLAVD CAESAR AVG GERM PM TRP XIII PP and this clearly suggests that the type was in use immediately before the legends were changed at the beginning of Issue VI.

*Cat. 228–237. PLATE VIII.*

**Issue VI** had the tribunician date TRP XIII using the obverse legend IMP NERO CLAVD CAESAR AVG GERM PM TR P XIII PP. The reverse types of Roma and Janus temple were still used but their details were changed slightly. The type of Roma holding a victory and spear, which had appeared on the dupondii at the end

of Issue V, was used initially but soon replaced by the type of Roma holding a spear and resting her arm on a shield. The parallel Janus temple type followed closely the new representation that had appeared on the sestertii; as on the sestertii its reverse legend began at six instead of eight o'clock, but it was the shorter form, characteristic of the dupondius, PACE PR VBIQ PARTA IANVM CLVSIT.

*Cat.* 238–241. PLATE IX.

### ASSES

**Issue I** consisted of the copper asses without SC. Nero's head was invariably bare. Initially the anepigraphic Apollo reverse type was used, and its three forms of obverse legend

NERO CLAVDIVS CAESAR AVG GERM PM TRP IMP PP;  
 NERO CLAVD CAESAR AVG GERM PM TRP IMP PP; and  
 NERO CLAVD CAESAR AVG GERM PM

TRP IMP contained all the major elements of the imperial titulature. These anepigraphic Apollo asses are extremely rare and the reverse type was soon modified to place part of Nero's titles PONTIF MAX TRP IMP PP as a reverse legend around the figure of Apollo. As the reverse legend of these asses now completed Nero's titulature, the obverse legends were shortened. Three forms were used:

NERO CLAVDIVS CAESAR AVG GERMANIC  
 NERO CLAVDIVS CAESAR AVG GERMAN and  
 NERO CLAVDIVS CAESAR AVG GERMA.

Little significance can be attached to these variations, though one suspects that the obverse legend may have been shortened during the course of the issue. A second reverse type of GENIO AVGVSTI (without SC) was also used; introduced apparently toward the end of the issue, since examples are extremely rare. Its normal obverse legend was NERO CLAVD CAESAR AVG GERM PM TRP IMP PP with the rare variant NERO CLAVD CAESAR AVG GER PM TRP IMP PP. A single PONTIF MAX TR P IMP PP Apollo copper As without SC has the full obverse legend NERO CLAVD CAESAR AVG GER PM

TRP IMP PP—a hybrid apparently struck from an obverse die that was originally engraved for the GENIO AVGVSTI reverse type.

*Cat.* 242–256. PLATE IX.

**Issue II** consisted of orichalcum asses with the same reverse types of Apollo and Genius, without SC or any marks of value. The evidence of portraiture and weight shows that this group must be regarded as the earliest emission of asses in orichalcum. Nero's head was either laureate or radiate. The obverse legends were

NERO CLAVD CAESAR AVG GERMANICVS with a laureate portrait principally used with the Apollo type,

NERO CLAVD CAESAR AVG GERMANIC and

NERO CLAVD CAESAR AVG GERM PM TRP IMP PP with a radiate head, and only found with the Genius type. The issue was struck from at least five obverse and twelve reverse dies.

*Cat.* 257–261. PLATES IX–X.

**Issue III** consisted of the main series of orichalcum asses which had SC and the mark of value T. During the course of this issue there was a marked lowering of the weight standard of the orichalcum As, and it is interesting to note that coins of lower weight are generally found with later portraits. But although it is clear that the weight standard was being reduced, individual coins are struck *al marco* not *al peso*, and it is impossible to establish a sequence within the issue from a consideration of weights alone. Moreover, as the whole issue was very restricted in time, it is equally difficult to establish a sequence within the issue based on the development of portraiture. There are two principal forms of obverse legend: NERO CLAVD CAESAR AVG GERMANICVS and NERO CLAVD CAESAR AVG GER PM TRP IMP PP, both variously abbreviated, but these have no chronological significance. The former is particularly appropriate to the Apollo reverse and the latter to the Genius reverse. They were in fact generally confined to their own reverse types, and exceptions due to muling are comparatively rare. The imperial head appears laureate and radiate. In Issue II the laureate head was used with the Apollo type and the radiate head with the Genius type. But in Issue III both forms were used with both types indifferently. It looks as though the two representa-

tions were continued from the preceding issue, but their original significance was lost. Neither form of portrait seems to have a specifically chronological significance. Both laureate and radiate heads are found equally on heavy and light asses and on slightly younger and slightly older portraits.

*Cat. 262–276. PLATE X.*

**Issue IV** reverted to asses in copper which were struck in two new reverse types of Victory and Janus temple. They had no mark of value, but always had SC. As on the sestertii and dupondii, there were two distinct types of Janus temple but these have no chronological significance. Within this issue three chronological groups can be distinguished:

IV.A—the earliest coins with the long obverse legends

NERO CLAVDIVS CAESAR AVG GER PM TRP IMP PP and

NERO CLAVD CAESAR AVG GER PM TRP IMP PP, the Janus temple asses with the long form of reverse legend PACE PR TERRA MARIQ PARTA IANVM CLVSIT.

IV.B—the middle group with the shortened obverse legend NERO CAESAR AVG GERM IMP.

IV.C—the latest group with the reverse legend of the Janus temple type abbreviated PACE PR VBIQ PARTA IANVM CLVSIT. There must have been a parallel issue of victory asses in both phase IV.B and IV.C but there is no distinctive feature about their reverse types to distinguish them in the same way as the Janus temple type.

*Cat. 277–293. PLATE X–XI.*

**Issue V** had the praenomen IMP and used IMP NERO CAESAR AVG GERM retaining unchanged the reverse types from the latest group of the fourth issue.

*Cat. 294–299. PLATE XI.*

**Issue VI** is marked by a new obverse legend IMP NERO CAESAR AVG GERMANIC which is found with a slightly modified form of the Janus temple type. Its legend starts at 6 instead of 8 o'clock, as on the final issues of sestertii and dupondii of the Janus temple type dated TRP XIII.

*Cat. 300–302. PLATE XI.*

## SEMISSSES

**Issue I** included the rare semisses in copper without SC which followed closely the pattern of the copper asses without SC.

*Cat.* 303–307. PLATE XII.

**Issue III**, which covered the general orichalcum coinage, included all the remaining semisses of Nero from Rome. The two reverse types of Roma and the gaming table were used throughout, although there was considerable variety in the reverse legends employed. In the first stage Nero's head was variously bare or laureate, and long forms of obverse legend were used, incorporating most of the elements in Nero's titulature. These forms varied considerably and many of the variants are known from a single obverse die. Very soon, however, the semisses adopted a shorter and more suitable form of obverse legend. Nero's head then was invariably laureate. The usual form of obverse legend was

NERO CAES AVG IMP with less common variants,

NERO CAESAR AVG IMP and

NERO CAE AVG IMP. In the first stage of this issue the mark of value S was sometimes omitted from the reverse—no doubt the engravers found the very small dimensions of an orichalcum semis die extremely crowded—but in the later stages of the issue S was invariably included.

*Cat.* 303–335. PLATE XII.

## QUADRANTES

Nero's quadrantes have no obverse portraits and it is not possible to attribute them to the mints of Rome and/or Lugdunum on the grounds of bust truncation and the presence or absence of the Lugdunum globe. Mattingly argued that the smaller coins in orichalcum were undoubtedly of the Roman mint and suggested that the larger coins in copper might by analogy fall to Lugdunum.<sup>5</sup> But Mattingly's suggestion is not substantiated by their distribution.

<sup>5</sup> *BMCRE* I, p. clxxxif.

In Italy both copper and orichalcum quadrantes are found, and the denomination is rarely found outside Italy. I have noted the following examples of finds:

	COPPER		ORICHALCUM	
	<i>Helmet</i>	<i>Owl</i>	<i>Helmet</i>	<i>Owl</i>
ITALY				
Volterra <sup>6</sup>				I
Ostia <sup>7</sup>			I	
Pompeii <sup>8</sup>		I		
Tiber <sup>9</sup>		2		2
Tiber <sup>10</sup>	12	29	30	37
Rome <sup>11</sup>	I	I	I	I
Aquileia <sup>12</sup>	one example – metal not specified			
Luni <sup>13</sup>	one example – metal not specified			
Liri I <sup>14</sup>			I	I
Liri II <sup>15</sup>		I		
SPAIN				
Menorca <sup>16</sup>	one example – metal not specified			
GERMANY				
Gegenbach <sup>17</sup>	one example – metal not specified			
Epfach <sup>18</sup>			I	
Pfünz <sup>19</sup>			I	

<sup>6</sup> *NScavAnt* 1955, p. 149.

<sup>7</sup> Ostia Museum.

<sup>8</sup> Antiquarium, Pompeii.

<sup>9</sup> Museo Nazionale delle Terme, Rome.

<sup>10</sup> Museo Capitolino, Rome.

<sup>11</sup> C. E. King, "Quadrates from the River Tiber," *NC* 1975, pp. 85–87.

<sup>12</sup> MSS. catalogue, Museo Archeologico, Aquileia.

<sup>13</sup> *AIIN* 12–14 (1965–67), p. 178.

<sup>14</sup> B. W. Frier and A. Parker, "Roman Coins from the River Liri. I," *NC* 1970, p. 96.

<sup>15</sup> W. E. Metcalf, "Roman Coins from the River Liri. II," *NC* 1974, p. 46. This coin cat. no. 362 has the obv. type of an owl and rev. type of a column.

<sup>16</sup> *NumHis* 1955 "Hallazgos Monetarios XII," 752, pp. 127–32.

<sup>17</sup> Bissinger, *Baden*, 2nd ed. no. 116.

<sup>18</sup> Kellner, *Die römischen Fundmünzen aus dem nördlichen Teil von Rätien*.

<sup>19</sup> *FRMD* I.3, Mittelfranken 5040.



It is therefore virtually certain that both helmet and owl types in both copper and orichalcum were struck at the mint of Rome.

Mattingly further suggested<sup>20</sup> that if the larger coins too were assigned to Rome they should be placed before the orichalcum issue in the year A.D. 60 at the first celebration of the quinquennial games, but we cannot accept this alternative arrangement either. All the quadrantes must have been issued before mid-A.D. 66, as they never include the praenomen *IMP* among Nero's titles; and their issues closely followed the pattern of the asses at Rome up to that date. The quadrantes are known in copper without *SC*, in orichalcum without *SC*, in orichalcum with *SC* generally accompanied by a mark of value, and in copper with *SC* but without a mark of value. This closely follows the pattern of the earlier asses, and we must regard the quadrantes as forming part of the same series of issues.

The quadrans was certainly the lowest denomination to be issued by Nero. Elmer's view that there was a further denomination of a *sescunx* or half-quadrans with the same types as the quadrans but struck to half the weight standard,<sup>21</sup> is quite unjustified. Elmer recognized the existence of the orichalcum quadrantes which Gabrici first distinguished in 1895,<sup>22</sup> but thought that some of the small coins of the owl/branch and helmet/branch types (apparently those without any mark of value, though that is not clearly stated) constituted a further and lower denomination in copper—the *sescunx*. This view is open to a number of objections. The point at which Elmer divided the weights of these coins into quadrantes and half-quadrantes seems to be purely arbitrary. When the weights which he quoted are plotted in a frequency table there is not the slightest suggestion that the supposed halves had a point of concentration at or near half the point of concentration for the larger quadrantes. The mark of value  $\therefore$  show that the small coins which bear them were in fact quadrantes. Yet these coins with the mark of value are of the same size and weight standard and had the same

<sup>20</sup> *BMCRE* I, p. clxxxii.

<sup>21</sup> G. Elmer, "Die Kleinkupferprägung von Augustus bis Nero" *NZ* 1934, pp. 18–30.

<sup>22</sup> *RIN* 1895, p. 364.

obverse and reverse types as others which Elmer describes as half-quadrantes; and, except for the mark of value which was in any case tiny and often off flan, there would have been no means of distinguishing the supposed sescunx from the orichalcum quadrans. Of all the coins cited by Elmer, those which I have seen are struck in the same metal as the quadrantes with the mark of value. It is clear that Elmer failed to realize that there was an issue of orichalcum quadrantes without marks of value, but which otherwise used the same types, size of flan and weight standard as the previous marked issue of quadrantes.

**Issue I** included quadrantes in copper without SC, parallel to the asses and semisses in copper without SC.

*Cat.* 336–337. PLATE XII.

**Issue II** consisted of the orichalcum quadrantes without SC and seems to have belonged to the same issue as that of the orichalcum asses without SC.

*Cat.* 338–340. PLATE XII.

**Issue III** consisted of the orichalcum quadrantes with SC and, usually, the mark of value—again parallel to the Roman asses and semisses in orichalcum with the mark of value T and S respectively. The mark of value .:, however, does not always appear to have been used on the quadrantes. The reverse field below the olive branch where the mark of value was normally placed is sometimes worn, corroded or even off flan on surviving examples. On clear specimens, however, quadrantes with the reverse legend GER PM TR P IMP PP invariably have the mark of value, whereas quadrantes with PM TRP IMP PP sometimes have it but sometimes clearly omit it. This second form of reverse legend was the one used subsequently on the fourth issue of quadrantes in copper with SC, and it was undoubtedly the latest form of reverse legend on the orichalcum quadrantes. It is thus clear that the mint ceased to mark its orichalcum quadrantes with the sign of value during the later stages of the third issue.

*Cat.* 341–356. PLATE XII.

**Issue IV**, the final issue, consisted of quadrantes in copper with SC but with no mark of value. This group appears to have been struck at the same time as the copper asses with SC of the Victory and Janus temple types. Initially the quadrantes were struck in the same two types of the owl/branch and the helmet/branch which had been used on the orichalcum quadrantes with SC, and had the same reverse legend PM TRP IMP PP, but at a later stage a new type of the owl/helmet was introduced. The series of quadrantes came to an end before mid-66, as they all show Nero's titles without the praenominal IMP.

*Cat.* 357-362. PLATE XII.

## 6. EARLIEST AES AT LUGDUNUM

### GENERAL CHARACTER

The identification of the first *aes* issues at Lugdunum would give an invaluable key to the sequence of issues at the mint. Although the coinage at Lugdunum in some respects copies extensively the types and legends of Rome, in others it introduces its own forms which give the issues a distinctive character. It has been suggested that some of the *aes* without SC were intended as pattern coinage for the new mint, but the details of their types were thoroughly Roman and the issue must be regarded as the earliest *aes* of Nero struck in Rome. There is however a small group of *aes* in all four denominations which combines features otherwise found exclusively at Rome or Lugdunum. Several examples have been found in Gaul, Britain and the Netherlands and the group clearly had a western circulation. It has no place in the internal development of the coinage at Rome, but fits naturally at the beginning of the Lugdunum series and can with confidence be regarded as the first issue struck at the reopened mint of Lugdunum.

### SESTERTII

The sestertii combining features of Rome and Lugdunum are:

#### Cat. 401

*Obv.*: NERO CLAVD CAESAR AVG GER PM TRP IMP PP

Head laur. r. with globe and aegis in front.

*Rev.*: ADLOCVT COH in exergue. SC l. and r. in field.

Nero standing l. on platform accompanied by Praetorian Prefect addressing three soldiers.

Vatican                      30.85 gm.    A601    P601

#### Cat. 402

*Obv.*: AS 401.

*Rev.*: ANNONA AVGVSTI CERES. SC in exergue.

Ceres sitting l. holding torch and ears of corn; before her, Annona standing with a cornucopiae.

BM <sup>1</sup>	28.00 gm.	A602	P602
BM	27.59 gm.	A603	P603
Walters, 1961		A603	P603
ANS	26.97 gm.	A604	P604
Egger XLV, 949		A605	P605

The globe is always found on sestertii at Lugdunum, but was never used at Rome. The aegis is frequently shown with right facing portraits of Nero on sestertii from Rome, but except for this issue, never occurs at Lugdunum. One of the British Museum sestertii of this group from Roach Smith's collection was found at London Bridge.

#### DUPONDII

The dupondii combining features otherwise found exclusively at Rome or Lugdunum are:

#### Cat. 490

*Obv.*: NERO CLAVD CAESAR AVG GER PM TRP IMP P

Head rad. r., with globe at point of bust.

*Rev.*: MAC AVG. SC l. and r. of steps.

Front view of Macellum Magnum.

Vienna	14.50 gm.	*A701	P701
Berlin	16.40 gm.	*A701	P701
Paris	13.91 gm.	*A701	P701
Lisbon		*A701	P701
Hall	16.82 gm.	*A701	P701
Glasgow C3758	15.09 gm.	*A701	P701
Manchester	13.80 gm.	A702	P702
Stockholm		A710	P702

PLATE XIV

\*after being recut. For prior use see Cat. 494 and 495.

#### Cat. 491

*Obv.*: As 490.

*Rev.*: SECVRITAS AVGVSTI. SC l. and r. in field, II in exergue.  
Securitas seated r. on throne. l. holding scepter in hand,

<sup>1</sup> Found at London Bridge c. 1840.

r. elbow resting against throne. In front, garlanded and lighted altar; against it, a lighted torch resting on a bucranium.

BM 338	13.91 gm.	A703	P703
Oxford	10.29 gm.	A703	P703
Mayenne <sup>2</sup>		A702	P704
Mayenne		A704	P705

**Cat. 492**

*Obv.*: As 490.

*Rev.*: VICTORIA AVGVSTI. SC l. and r. in field,  $\bar{\Pi}$  in exergue. Draped Victory walking l., r. holding wreath, l. a palm. Beneath, line indicating the ground.

Oxford	14.90 gm.	A705	P706
Madrid		A702	P707
Blackburn	16.78 gm.	A702	P707
Paris		A702	P708
Mayenne		A704	P709
Mayenne		A704	P709
Mayenne		A704	P710
Mayenne		A706	P711
Mayenne		A707	P712
York <sup>3</sup>		—	—

PLATE XVI

**Cat. 493**

*Obv.*: NERO CLAVD CAESAR AVG GER PM TRP IMP PP

Head rad. r. with globe at point of bust.

*Rev.*: As 490.

BM	14.56 gm.	A708	P713	PLATE XIV
London G.	13.77 gm.	A709	P713	PLATE XIV
Cahn 61, 772		A710	P714	
Wulzinger <sup>4</sup>	13.53 gm.	A711	P715	
Almirall	12.44 gm.	A714	P733	

<sup>2</sup> This coin and the other examples in the Mayenne Musée were found in the river bed at Mayenne in 1864.

<sup>3</sup> Found in York in 1925.

<sup>4</sup> R. Ball Sale 6 (Berlin, February 9, 1932), 1055.

## Cat. 494

*Obv.*: As 493.*Rev.*: As 491.

Oxford	13.35 gm.	A710	P717	PLATE XV
BM	12.48 gm.	A708	P716	PLATE XV
Hague	13.5 gm.	A701	P718	
Blackburn	15.88 gm.	A712	P719	
Blackburn	12.55 gm.	A710	P717	
Mayenne		A701	P718	
Private Coll., London <sup>5</sup>	12.96 gm.	A701	P721	PLATE XV
Condé <sup>6</sup>	14.57 gm.	—	—	
London G.	19.45 gm.	A712	P720	PLATE XVI

## Cat. 495

*Obv.*: As 493.*Rev.*: As 492.

Glasgow 112	13.51 gm.	A713	P722	PLATE XV
Abbas <sup>7</sup>		A713	P722	
Blackburn	13.80 gm.	A701	P723	PLATE XV
Rome, Capitol		A701	P723	
London G.	13.80 gm.	A713	P722	
Webb	13.59 gm.	A714	P724	
Mayenne		A715	P725	
Mayenne		A715	P726	
Mayenne		A716	P727	
Mayenne		A717	P728	
Mayenne		A717	P729	
Manchester	14.32 gm.	A717	P730	
Condé	11.20 gm.			
Condé	12.50 gm.			
Condé	12.56 gm.			
Condé	12.79 gm.			
Condé	13.60 gm.			
Condé	13.71 gm.			

<sup>5</sup> Shown at the British Museum in 1957.<sup>6</sup> *RN* 1969, pp. 76–130.<sup>7</sup> Found in London in 1956 on the site of Bucklersbury House, cf. *AntJ* 1962, p. 40.

Cat. 496

*Obv.*: As 493.

*Rev.*: VICTORIA AVGVSTI. SC l. and r. in field,  $\Pi$  in exergue. Victory draped flying l., r. holding a wreath, l. a palm; r. leg forward clear of drapery.

BM	16.50 gm.	A712	P731	PLATE XV
Cirencester <sup>8</sup>		A711	P732	PLATE XV
Mayenne		A711	P732	

The obverse combines the radiate head, normal on dupondii at Rome but not otherwise found at Lugdunum, with the globe that is invariably found at Lugdunum but never at Rome. Details of the reverse types also combine features of both Rome and Lugdunum. Two forms of the Victoria type are used. One shows Victoria flying left with no ground line, and with her left leg forward clear of her drapery (PLATE XV, 496)—the form of Victoria flying left invariably used at Rome (PLATE VII, 185). The other shows Victoria walking left on a ground line with drapery billowing back from her left leg—the distinct Lugdunum variety not used at Rome.

Fourteen of these dupondii were found at Mayenne<sup>9</sup> and seven at Condé sur Aisne; one was found in London and another was probably found at Cirencester. With one single exception, all the pieces that I have noted belong to collections in the western provinces. Like the asses in orichalcum and copper described below, these dupondii combine features otherwise found exclusively at Rome or Lugdunum, and certainly circulated in the western provinces.

Altogether at least thirty-four reverse dies are used with eighteen obverse dies. In several cases different reverse types share obverse dies—a phenomenon which is seen repeatedly in all Nero's *aes* issues at both Rome and Lugdunum. It is interesting to note that several of the dies remained in use after a serious flaw had developed (see PLATE XVI, 492 and XV, 495(1)).

<sup>8</sup> Probably found in Cirencester.

<sup>9</sup> There are more dupondii at Mayenne with radiate head of Nero and a globe at the point of his bust truncation, but the others have been excluded from the die catalogue because of their worn state.



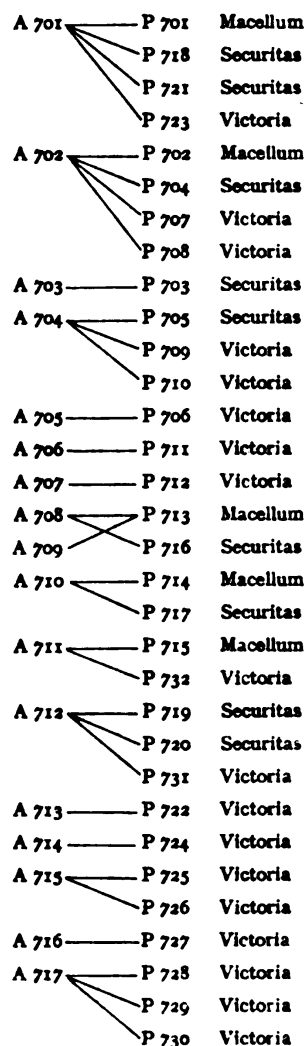


FIG. 3. DUPONDII  
LUGDUNUM ISSUE L-III

The dupondii themselves can be subdivided into three distinct chronological stages: 1) in the first group, the two reverse dies of VICTORIA AVGVSTI have the Roman type of Victory (P731 and P732). One of SECVRITAS AVGVSTI dies has the type of Securitas naked to the waist (P720) which is not otherwise found at Lugdunum, though it sometimes occurs at Rome. Both the obverse dies have a globe at the tip of the bust, but like the orichalcum asses of Lugdunum do not have a very distinct Lugdunum truncation; 2) the reverse dies of the second group all have types that subsequently become the regular Lugdunum forms. The obverse dies have a more developed Lugdunum truncation than the first group but the characteristic Lugdunum M is only slightly indicated and the line of the truncation still resembles that of the *aes* at Rome; 3) the third group continues with the characteristic Lugdunum forms of reverse types. Its obverse dies are, however, far closer to those of the fully developed issues at Lugdunum and the bust truncation is shown in a bolder manner.

The obverse portraits of the first two groups closely resemble those of the orichalcum asses at Lugdunum, and can be regarded as contemporary with that issue. The fully developed portraiture of the third group suggests that it belongs to the same period as the rare copper asses with mark of value T̄.

#### ORICHALCUM ASSES

Although most of Nero's orichalcum asses were struck at Rome and do not seem to have circulated very far outside Italy, one small group certainly circulated in the western provinces and constituted a short issue from Lugdunum. It consisted of the following varieties:

##### **Cat. 537**

*Obv.*: NERO CLAVD CAESAR AVG GERMANI

Head laur. r. with a globe at point of bust truncation.

*Rev.*: PONTIF MAX TR POT IMP PP. SC l. and r. in field, T̄ in exergue.

Nero, laur. in the robes of Apollo citharoedus walking r., l. holding lyre r. playing it.

Vienna	6.92 gm.	A801	P801
Herts County		A801	P801
Frost <sup>10</sup>		A801	P801

**Cat. 538***Obv.*: As 537.

*Rev.*: GENIO AVGVSTI. SC l. and r. in field, T in exergue.  
Genius standing l., l. holding cornucopiae, r. patera over lighted altar.

Paris	8.63 gm.	A802	P802	PLATE XVIII
BM <sup>11</sup>	6.85 gm.	A801	P803	
Cirencester <sup>12</sup>		A801	P803	
London G.		A801	P802	

**Cat. 539**

*Obv.*: NERO CLAVD CAESAR AVG GERMANIC  
Head laur. l.

*Rev.*: As 537.

Vienna	7.25 gm.	A803	P804	PLATE XVII
BM	9.65 gm.	A803	P805	
Abbas <sup>13</sup>		A803	P804	
Hague	6.25 gm.	A803	P806	
Oxford		A803		
Dumfries <sup>14</sup>		A803	P804	

**Cat. 540***Obv.*: As 539.*Rev.*: As 538.

Paris	7.35 gm.	A803	P802	PLATE XVIII
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The mark of value T is regularly found on Nero's orichalcum asses at Rome but not normally used on asses of Lugdunum. The laureate head was regularly used on the later orichalcum at Rome and was retained when the mint subsequently changed to the production of

<sup>10</sup> Found in London in 1956 on the site of Bucklersbury House, cf. *AntJ* 1962, p. 40.

<sup>11</sup> Found at London Bridge in 1840.

<sup>12</sup> Probably found in Cirencester.

<sup>13</sup> Found in London in 1956 on the site of Bucklersbury House.

<sup>14</sup> Probably found in N. Britain.

copper asses of the Victory and Janus temple types, whereas Lugdunum copper asses invariably had the bare head of Nero. In this group, however, the asses with the right facing portrait have an unmistakable Lugdunum globe; and while the left facing heads have no globe they clearly show a bust truncation that later developed into the characteristic Lugdunum form, and the variety is die-linked to the right facing head with the globe. In marked contrast to the other varieties of orichalcum asses this group is not represented in the major Italian collections, and several of the specimens cited have a probable or certain provenance in the west.

The globe on the asses looks as though it may have been an ungainly final C of the obverse legend NERO CLAVD CAESAR AVG GERMANIC which became attached to the front of the bust truncation and which was completed into a globe by the engraver for the sake of neatness. Its method of attachment is certainly different from that of the later Lugdunum series. It may possibly mark the beginning of the characteristic Lugdunum globe as an engraver's mistake that was promptly converted into a mint mark.

#### COPPER ASSES WITH T

A further hybrid group, also very rare, which closely follows the orichalcum asses at Lugdunum is the issue of copper asses with the mark of value T:

#### Cat. 541

*Obv.*: NERO CLAVD CAESAR AVG GERMANICVS

Head bare r., with small globe at point of bust truncation.

*Rev.*: PONTIF MAX TR POT IMP PP. SC l. and r. in field, T in exergue.

Nero, laur., in the flowing robes of Apollo citharoedus standing r., l. holding cithara, r. playing it.

Copenhagen 10.15 gm. A804 P807 PLATE XVIII

Mayenne A804 P808

Mayenne A804 P808

Mayenne A805 P808

Brussels<sup>15</sup>

<sup>15</sup> Published by M. Thirion, *CENB* 1965, pp. 14-15.

## Cat. 542

*Obv.*: As 541 but head bare l.*Rev.*: As 541.

BM 237	11.31 gm.	A806	P809	PLATE XVIII
Paris	11.15 gm.	A806	P810	
Nijmegen <sup>16</sup>		A806	P810	
Nijmegen <sup>17</sup>		A806	P810	
Mayenne		A807	P811	

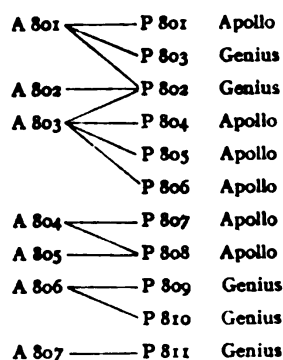


FIG. 4. ORICHALCUM AND COPPER ASSES  
LUGDUNUM ISSUE L-III AND TRANSITIONALISSUE

These coins are quite regular in style and fabric and can hardly be dismissed as unorthodox imitations. They have the red hue of copper asses, and the metal of the British Museum specimen has been shown to be copper by spectrographic analysis. Except for these rare pieces, the mark of value is found on Nero's asses in orichalcum alone.

Nero's head is bare, as always on the Lugdunum copper asses; it has the characteristic bust truncation of the Lugdunum mint; and the tapering elongation of the bust is terminated by a small globe—the same sort of treatment that can be seen on several of the earlier copper asses at Lugdunum.<sup>18</sup> The reverse always has SC whereas

<sup>16</sup> Found at Hunnerberg, Nijmegen.

<sup>17</sup> Local find acquired by the Rijksmuseum G.M. Kam in 1969.

<sup>18</sup> Cf. PLATE XVIII, 542, 544.

copper asses at Rome of the Apollo type never do. The reverse legend is PONTIF MAX TR POT IMP PP—the Lugdunum form, while Rome always has PONTIF MAX TR P IMP PP on the copper Apollo asses. The obverse legend is NERO CLAVD CAESAR AVG GERMANICVS—the common Lugdunum form which is not found on the Roman copper asses, and the letters of the obverse legend are executed in the bolder Lugdunum manner. The heads are rather small; full use is not made of the obverse field inside the lettering; and the hair is treated in a rather more formal way than in the fully developed Lugdunum style—peculiarities that can sometimes be seen in the earlier stages of the normal series at Lugdunum.<sup>19</sup>

The only distinctly Roman feature of the coins is the mark of value on the reverse. This is, however, no justification for Mattingly's attribution to Rome,<sup>20</sup> when the characteristic truncation of the bust, the globe and the other details of style, type and content belong to Lugdunum, and the evidence of finds clearly shows that they circulated in the western provinces. Of the ten examples known to date, four were found at Mayenne, and two at Nijmegen.

Although it is paralleled by the mark of value  $\bar{\Pi}$  on some dupondii, the mark T on these asses is essentially illogical at Lugdunum. These copper asses were of closely similar fabric, the same weight and size as the earlier copper asses already in circulation in the west. Orichalcum asses had not been issued in large numbers at Rome, and, except for the rare issue described above, no orichalcum asses seem to have circulated in the west. Yet the group does give an additional proof that orichalcum asses were of the same value as the copper ones in spite of their different size and weight; it confirms the evidence of the rare western orichalcum asses that the mint at Lugdunum originally copied its reverse type from the orichalcum asses of Rome (not from the copper asses without SC of the anepigraphic or PONTIF MAX TR P IMP PP types); and it forms an issue that readily accounts for the transition from the orichalcum asses at Rome to the normal copper asses of the Apollo type at Lugdunum.

<sup>19</sup> Cf. PLATE XVIII, 542.

<sup>20</sup> *BMCRE* I, p. 245, 237.

## ORICHALCUM SEMISSES

The orichalcum semisses of this group are:

## Cat. 604

*Obv.*: NERO CLAV CAESAR AVG

Head laur. r. with globe at tip of bust.

*Rev.*: CER QVIN ROM CON. SC in exergue.

A table seen from front and right. On it, an urn l., a wreath r.

BM	3.42 gm.	A901	P901	
ANS	3.63 gm.	A901	P901	
Madrid		A901	P901	
Paris	3.20 gm.	A901	P901	PLATE XX
Paris	3.10 gm.	A901	A901/Brockage	
Corbel	3.94 gm.	A901	P901	

The usual semisses from Rome are struck in orichalcum, while those from Lugdunum are in copper. This rare group in orichalcum has the laureate head regularly used at Rome, but does not have the Roman mark of value and it has the Lugdunum globe at the base of the obverse bust truncation. Although there is no evidence of provenance, the hybrid Rome/Lugdunum character is similar to that of the dupondii and asses discussed above, and there is no doubt that they must belong to the same context.

## CONTEXT OF THE ISSUE

The general character of this earliest issue of *aes* at Lugdunum connects it with the latter part of the general orichalcum coinage at Rome i.e., with Issue III of the *aes*. The asses and semisses of this Lugdunum group are in orichalcum not in copper, and the issue of these denominations in orichalcum was restricted to Issue II and III at Rome. All the denominations of this Lugdunum group have SC and this is first introduced to the *aes* at Rome in Issue III. The dupondii and asses of this Lugdunum group have  $\overline{\text{II}}$  and  $\overline{\text{I}}$ , and these marks of value are found at Rome only in Issue III.

## 7. ISSUES OF AES AT LUGDUNUM

### SEQUENCE OF THE ISSUES

The *aes* at Lugdunum is divided into two broad chronological groups by Nero's use of the IMP as a cognomen until mid-66 and as a praenomen thereafter; and the identification of the first *aes* issued at Lugdunum provides the additional key needed to establish the sequence of the five stages that can be distinguished at this mint. The chronology of these five stages corresponds with four of the issues that have been distinguished for the *aes* at Rome. These stages at Lugdunum are denoted as Issues L-III, L-IVA, L-IVB, L-V and L-VI with the distinctive prefix L, but using the the same numbering as the parallel Rome Issues III, IV, V and VI. There were no issues at Lugdunum corresponding to Issues I and II of the *aes* at Rome.

**Issue L-III** was the first issue of *aes* at Lugdunum. It consists of the sestertii, dupondii, asses and semisses in orichalcum that have been described in Chapter 6, coins which combine features normally peculiar to Rome with details that later characterize the series at Lugdunum.

**Issue L-IVA** is marked by the return to the earlier Julio-Claudian pattern of *aes* denominations, with the sestertii and dupondii in orichalcum and the asses and semisses in copper. It is distinguished by early features, different for each denomination. The sestertii have a long angular bust truncation and a small globe; the dupondii retain the mark of value  $\overline{\text{II}}$  from Issue L-III; the asses retain the obverse legends of asses of Issue L-III; and the semisses follow the obverse legends of the asses.

**Issue L-IVB** consists of the same range of denominations, still with IMP as a cognomen, but now characterized by fully developed Lugdunum forms of obverse portraiture and reverse type.



**Issue L-V** has the same range of denominations with the same reverse types but is distinguished by its use of **IMP** as a praenomen.

**Issue L-VI** can be distinguished on the sestertii and dupondii by subsequent modifications of some features of coins with the praenomen **IMP**. For example *Securitas dupondii* which have **SC** in the field in Issues L-III to L-V transfer it to the exergue in Issue L-VI. Within these issues there are additional varieties of obverse legends. There seems to have been a certain latitude allowed to individual engravers in the precise forms of terminal abbreviations employed. For example, **NERO CLAVD CAESAR AVG GER PM TRP IMP P** and **NERO CLAVD CAESAR AVG GER PM TRP IMP PP** were used in Issues L-III, L-IVA and L-IVB of the dupondii. **IMP NERO CAESAR AVG P MAX TR P PP** and **IMP NERO CAESAR AVG P MAX TR POT PP** were both used in Issues L-V and L-VI of the dupondii. These minor varieties of abbreviation cannot therefore in themselves have had any chronological significance. There was, however, a general tendency, seen in the sequence of the semisses, increasingly to abbreviate the components of the imperial titulature. **PONTIF MAX** gave way to **PONT MAX** and further to **P MAX**.

A longer form of abbreviation may sometimes have been more appropriate to the broader flan of a larger denomination, and have been used later than a shorter abbreviation on a smaller coin. A curious overstrike in the British Museum<sup>1</sup> shows that **IMP NERO CAESAR AVG P MAX TRP PP** was used on asses before **IMP NERO CAESAR AVG PONT MAX TRP PP** was used on some sestertii. The overstrike has:

*Obv.*: **(IMP NERO CAE)SAR AVG PONT MAX (TRPOT PP)**

Head laureate l. globe.

Struck from a sestertius die over a reverse of the *As* type of victory carrying a shield.

*Rev.*: **SC** l. and r. in field.

A triumphal arch. Struck from a sestertius die over the obverse of an *As* reading **(IMP NERO CAES)AR AVG P MAX (TRP PP)** (PLATE XXII, o).

<sup>1</sup> This coin was found in the breakwater behind the Kaite opposite Isleworth Town in the gravel, August 1839, and was given to the British Museum by C. Roach Smith.

There can be little doubt that it was an ordinary copper As of the Victory type overstruck by a pair of sestertius dies, perhaps as a trial striking.

## SESTERTII

**Issue L-III** is distinguished by the use of the aegis that was often used on sestertii at Rome together with the globe that eventually became the Lugdunum mint mark. The obverse legend NERO CLAVD CAESAR AVG GER PM TR P IMP PP was taken directly from the contemporary sestertii at Rome, and so too were the reverse types of Adlocutio and Annona.

*Cat.* 401-402.

**Issue L-IVA** had no aegis and is distinguished by the small neat version of the Lugdunum globe which is placed at the end of a long angular termination to the bust truncation. This treatment of the globe must have a chronological significance because it is paralleled on the dupondii where Issue L-IVA is additionally distinguished by the mark of value  $\overline{\text{II}}$ , and on the copper asses where Issue L-IVA is additionally distinguished by its own obverse legend. The validity of this distinction for the sestertii is reinforced by the higher weight standard to which sestertii of Issue L-III and L-IVA were struck. Most of them weigh between 27 and 29 gm. A few sestertii of Issue L-IVB were struck to this standard, but most of them, as the subsequent sestertii of Issues L-V and L-VI, fall between 23 and 26 gm.

The reverse types of Adlocutio and Annona were continued from Issue L-III and the types of Decursio, Roma and the Arch were added, all copied directly from the types used at Rome, and treated in much the same way as at Rome.

*Cat.* 403-414. PLATES XII-XIII.

**Issue L-IVB** had a large globe attached to the bust of a more elegant and natural neck termination. The general treatment of the obverse portraits was more spirited, and showed much the same stage of development as the dupondii and asses of Issue L-IVB. To the reverse types of the second issue were added two new ones of the Harbor at Ostia, and the Temple of Janus. Both were ultimately

derived from types at Rome, but the prototypes were not copied as closely as in L-III and L-IVA. The Temple of Janus was shown in a more decorative way than at Rome; the Harbor at Ostia was represented in a bolder and more schematic fashion with an altered reverse legend.

*Cat.* 415-429. PLATE XIII.

**Issue L-V** is distinguished from the preceding issue by its use of the praenomen IMP. There were several varieties of obverse legend. From the dupondii and semisses it appears that the abbreviation of Potestate into POT or P had no chronological significance, but that in other respects the imperial titles were progressively abbreviated during the course of the issue. Sestertii with the longest form

IMP NERO CAESAR AVG PONTIF MAX TRIB POT PP

had a comparatively early portrait (PLATE XIII, 432) not very different from those in the third issue. It was comparatively rare and soon gave way to the commoner form

IMP NERO CAESAR AVG PONT MAX TR POT PP and

its rare variant

IMP NERO CAESAR AVG PONT MAX TR P PP.

*Cat.* 430-458. PLATES XIII-XIV.

**Issue L-VI** has the imperial titles abbreviated further to

IMP NERO CAESAR AVG P MAX TR POT PP;

IMP NERO CAESAR AVG P MAX TR P PP;

IMP NERO CAESAR AVG P M TR POT PP and

IMP NERO CAESAR AVG P M TR P PP.

*Cat.* 459-489. PLATE XIV.

#### DUPONDII

**Issue L-III** combined the radiate head normal on dupondii at Rome with the globe and bust truncation characteristic of Lugdunum. The Securitas and Victoria types had the mark of value  $\bar{\text{II}}$  in the exergue, but the Macellum type, which was demonstrably contemporary, had no mark of value, probably because the projecting steps at the base of the crowded design left no room.

*Cat.* 490-496. PLATES XIV-XVI.

**Issue L-IVA** had a laureate instead of the radiate crown on the obverse. Otherwise it continued to use the same obverse legends and reverse types as the first issue. The Securitas and Victoria types again had the mark of value  $\bar{\Pi}$  and, as in the first issue, common obverse dies show that the Macellum type was struck concurrently with them.

*Cat.* 497–511. PLATE XVI.

**Issue L-IVB** no longer had the marks of value in the exergue of its Securitas and Victoria types. Other features remained unchanged, and it used the same range of obverse legends as in Issue L-IVA.

*Cat.* 512–518. PLATES XVI–XVII.

**Issue L-V** had a new range of obverse legends giving Nero IMP as a praenomen. The usual form was IMP NERO CAESAR AVG P MAX TR P PP. Occasionally the alternative from IMP NERO CAESAR AVG P MAX TR POT PP was used instead, but this seems to have been a variant without any chronological significance. The reverse types of Securitas and Victoria were retained unchanged from the preceding issue.

*Cat.* 519–526. PLATE XVII.

**Issue L-VI** had SC in the exergue of the Securitas type, not in the field. There are no Victoria dupondii with SC in the exergue, but it is clear that the ordinary Victoria type was struck concurrently with the new form of the Securitas type. Several Victoria dupondii share obverse dies with Securitas dupondii that have SC in the exergue; and in one case the development of an obverse die flaw proves that the Victoria dupondius (PLATE XVII, 534) was struck later than the Securitas dupondius with SC in the exergue (PLATE XVII, 533).

*Cat.* 527–536. PLATE XVII.

#### ASSES

**Issue L-III** consisted of the rare orichalcum asses with the mark of value  $\bar{\Gamma}$  and a globe or Lugdunum form of bust truncation.

*Cat.* 537–540. PLATES XVII–XVIII.

A transitional group between Issues L-III and L-IVA is distinguishable in the rare group of copper asses with the mark of value T. These coins are struck in copper like the other asses of L-IVA but have the mark of value T which is otherwise found only on the orichalcum asses of Issue L-III.

*Cat.* 541–542. PLATE XVIII.

**Issue L-IVA** consisted of Apollo type copper asses, without a mark of value. It retained the obverse legend of the first issue  
NERO CLAVD CAESAR AVG GERMANICVS. The form  
NERO CLAVD CAESAR AVG GERMANICV

was a rare variant due to careless spacing by an engraver. The rare asses of the Victory, Janus temple, Ara Pacis and Genius types with this obverse legend never constitute substantive varieties, and seem to be hybrids due to the continued use of a limited number of these obverse dies into the next issue.

*Cat.* 543–551. PLATE XVIII.

**Issue L-IVB** had new forms of obverse legend  
NERO CLAVD CAESAR AVG GER PM TRP IMP  
NERO CLAVD CAESAR AVG GER PM TRP IMP P  
and

NERO CLAVD CAESAR AVG GER PM TRP IMP PP  
and four substantive reverse types of Ara Pacis, Genius, Janus temple and Victory. Occasional examples are recorded of the new form of obverse legend with copper asses of the Apollo type, but these never constitute a substantive variety, and seem to be hybrids produced by the continued use of a limited number of reverse dies from Issue L-IVA after the new types of Issue L-IVB had been introduced. There seems to be no important chronological distinction between the various abbreviations of obverse legend, and the different forms seem to be determined by the engraver's ability to fit the legend into the space available.

*Cat.* 552–579. PLATES XVIII–XIX.

**Issue L-V** had a new range of obverse legends to give Nero IMP as a praenomen:

IMP NERO CAESAR AVG PONTIF MAX TRIB POT PP  
 IMP NERO CAESAR AVG P MAX TR POT PP  
 IMP NERO CAESAR AVG P MAX TR P PP  
 IMP NERO CAESAR AVG P MAX TR P P  
 IMP NERO CAESAR AVG P M TR POT PP and  
 IMP NERO CAESAR AVG P M TR P PP.

The third is by far the most common form. The first is extremely rare; its lettering is small and neat and the legend occurs with early portraits very similar to those of the third issue. One suspects that this long form of legend was tried out immediately after Nero assumed the praenomen, but was soon abandoned because it was too long. Other variations in the abbreviations of MAX or M, POT or P seem to have been used without any chronological significance when the engraver had difficulty in spacing the legend.

*Cat.* 580–601. PLATE XIX.

**Issue L-VI** of copper asses cannot be distinguished by objective criteria as in some other denominations. But the evidence of developed portraiture suggests that a proportion of the Victory asses at least are contemporary with Issue L-VI of the dupondii. Although it is true that Victory asses constitute 75% of Lugdunum asses found in the west, it is only among asses with the praenomen IMP that the numerical superiority of the Victory type emerges. This strongly suggests that the Lugdunum mint may have continued to issue asses of the Victory type after it had ceased to strike the other reverse types of Issues L-IV and L-V. We may therefore not unreasonably postulate a final issue of asses at Lugdunum which used the reverse type of Victory.

*Cat.* 602, 603.

#### SEMISSSES

The classification of Lugdunum semisses has hitherto been singularly confused by the failure of earlier numismatists to distinguish them from the rare copper semisses struck at Rome, the normal orichalcum semisses of Rome and the unofficial copies of Lugdunum semisses. Although Mattingly and Sydenham correctly distinguished the Lugdunum group in the British Museum, many of the varieties

quoted in the *RIC* and the footnotes to the *BMCRE* I merely perpetuate the confusion of earlier writers.

**Issue L-III** consisted of the rare semisses in orichalcum with a globe at the top of Nero's bust.

*Cat.* 604. PLATE XX.

**Issue L-IVA** consisted of semisses in copper with the obverse legend NERO CLAVD CAESAR AVG GERMANICVS. This is the form of obverse legend used on copper asses of Issue L-IVA. This issue of semisses was struck in the two types of Roma seated left on a cuirass and of the table commemorating the Certamen Quinquennale—two types which are used in each succeeding issue.

*Cat.* 605–609. PLATE XX.

**Issue L-IVA** consisted of semisses in copper with shorter abbreviations of the title Germanicus.

NERO CLAVD CAESAR AVG GERMAN

gave way to

NERO CLAVD CAESAR AVG GERMA

and was eventually replaced by

NERO CLAVD CAESAR AVG GERM

the usual form of obverse legend in this issue.

*Cat.* 610–619. PLATE XX.

**Issue L-V** consisted of semisses in copper with IMP in the praenominal position among Nero's titles. Some semisses in this group had far more of the imperial titles on the obverse and consequently fewer titles carried over to the reverse of the Roma type. PONTIF MAX TR POT IMP PP and CER QVINQ ROM CON were undoubtedly the earliest forms of reverse legend as they alone were carried over from the third issue. This in turn suggests that the obverse legend IMP NERO CAESAR AVG, the sole form with which these two reverse legends are found in Issue L-V, must have been the earliest form of obverse legend in this issue. The chronological development was thus one in which the components of the imperial titulature were increasingly transferred from the reverse to the obverse and in the process the titles of the obverse legend became increasingly abbreviated.

This issue seems to have closely followed L-IVB. There is no sharp break in the presentation of imperial titulature; the early portraits are close to those of the third issue; and

IMP NERO CAESAR      PONTIF MAX TRIB POT PP and

IMP NERO CAESAR AVG PONT    MAX TRIB POT PP

seem to have been characteristic of the first emissions of sestertii, dupondii and asses with the praenomen IMP.

*Cat.* 620–633. PLATE XX.





## 8. MINT ORGANIZATION

### ORGANIZATION OF MINTS INTO OFFICINAE

Roman and Byzantine mints from the mid-third to the eighth century A.D. are known to have been divided into a number of officinae or workshops, and most coins of that period bear the mark or number of the officina in which they were produced.<sup>1</sup> The purpose of the officina system was clearly to divide the work of each mint between a number of responsible divisions of manageable proportions, and to exercise a degree of administrative control over the coins produced by the different divisions. The principal purpose of any such organization would be lost if the mint authority was not able to apportion blame for any lapse from the standards for metal, weight and workmanship which it had laid down. If the mint inspectors were able to distinguish easily the coins of different officinae, so too, in theory at least, should the modern numismatist. First century coinages are not labelled with any explicit officina numbers, nor apparently with any privy marks. The sole distinguishing features, which can have been used to differentiate officinae, are varieties in obverse legend and bust treatment or in reverse types.

Kraay has recently tried to establish the distinguishing characteristics of Galba's officinae by studying the die relationships of the sestertii.<sup>2</sup> Such a die study clearly shows the physical connections between whole blocks of die-linked coins and often solves difficult problems of mint attribution; but we cannot safely postulate that a die-linked group of coins was necessarily produced by a single

<sup>1</sup> Officina numbers first appear on the millennial issue of Philip in A.D. 248. See R. A. G. Carson, "System and Product in the Roman Mint," *Essays in Roman Coinage presented to Harold Mattingly* (Oxford, 1956), pp. 235 ff. See also S. K. Eddy, *The Minting of Antoniniani A.D. 238-249 and the Smyrna Hoard*, *ANSNM* 156 (New York, 1967), pp. 117 ff. for a discussion of a possible reason for the overt identification of officinae.

<sup>2</sup> C. M. Kraay, *The Aes Coinage of Galba*, *ANSNM* 133 (New York, 1956).

*officina*.<sup>3</sup> *Officinae* were essentially subdivisions of a mint and not separate establishments in different locations which would constitute independent or branch mints. The interchange of dies on a large scale between *officinae* of the same establishment is thus a very real possibility, whereas the interchange of dies between mints in different places can only have taken place under the most exceptional circumstances. Grierson has noted several obverse die links between the marked *officinae* of Basiliscus and Marcus, Zeno and Leo Caesar, Leo II and Zeno;<sup>4</sup> Pearce has noted numerous die links between the marked *officinae* of eastern mints in the fourth century;<sup>5</sup> Bastien has noted an obverse die link between folles of the 1st and 2nd *officinae* at Lyons under Constantius Chlorus;<sup>6</sup> Gricourt has noted an obverse die link between the 2nd and 3rd *officinae* at Lyons under Probus;<sup>7</sup> and Woodward has noted several obverse die links between the reverse types that seem to mark the six distinct *officinae* in the coinage of Pertinax.<sup>8</sup> Nor can we necessarily suppose that each *officina* will display a distinctive style in its treatment of the details of obverse portraiture or of reverse types, as Mattingly suggested.<sup>9</sup> While each *officina* may have had its own establishment of engravers, the *officinae* were, after all, part of the same mint and the engraving of dies may equally well have been carried out centrally for the whole establishment.<sup>10</sup>

There is a bewilderingly rich variety of obverse and reverse legends and types in the coinages of Nero. But once it is recognized that some of these varieties are the distinctive features of different mints; that others have a chronological significance and characterize a particular issue; and that there is a limited number of substantive varieties in each issue at each mint, a clear and recurrent pattern emerges which enables us to determine the *officina* arrangement.

<sup>3</sup> See my review of Kraay, *ANSNM* 133 in *NC* 1957, pp. 269-73.

<sup>4</sup> *SM* July 1961, pp. 1-8.

<sup>5</sup> Cf. *RIC* IX, p. 230 note to 67 (c).

<sup>6</sup> *SM* Nov. 1960, pp. 75-77.

<sup>7</sup> *SM* Feb. 1968, pp. 5-8.

<sup>8</sup> *NC* 1957, p. 89.

<sup>9</sup> *RIC* IV.3, p. xvi.

<sup>10</sup> See below p. 128.

## MARKS OF OFFICINAE UNDER NERO

In the gold and silver issues of Rome dated TRP II to TRP X Nero's head was always shown bare to right and there was only one form of obverse legend throughout: NERO CAESAR AVG IMP. In the undated series after A.D. 64 the laureate head alone was employed and it always faced right; although there were three distinct forms of obverse legend each had a definite chronological significance and marked a distinct issue.<sup>11</sup> It would thus have been quite impossible to distinguish the gold and silver coins of different officinae by any obverse detail. The number of reverse types, however, in each issue of aurei and denarii varied with the fluctuations in the volume of coinage issued. There was invariably an increase in the number of reverse types when the volume of coinage became larger and one might reasonably suppose that there was an increase in the number of officinae responsible for it. Conversely fewer reverse types were employed when the volume of coinage in an issue was reduced. This is the clearest possible indication that the coins of different officinae were marked by the use of a distinctive reverse type, and that when an additional officina was brought into use an additional reverse type was introduced.

Throughout the dated series the volume of each year's issue was fairly constant, except that the issue dated TRP VII—at the height of the war in the east—was about three times as large as that of any of the preceding years.<sup>12</sup> After the three reverse types of the

<sup>11</sup> See Chapter 3.

<sup>12</sup> There is clear evidence for this in the relative numbers from the Pudukota hoard (NC 1898, pp. 304-5.):

	<i>Accession Types</i>	<i>Corona Civica</i>	<i>Ceres</i>	<i>Virtus</i>	<i>Roma</i>	<i>Total</i>	<i>Percentage of Nero</i>
TRP	15					15	13.0
TRP II		9				9	7.8
TRP III		9				9	7.8
TRP IIII		3				3	2.6
TRP V		8				8	6.9
TRP VI		7				7	6.1
TRP VII		9	13	12	2	35	30.4
TRP VIII				3	3	6	5.2
TRP VIIII			3	3	3	9	7.8
TRP X				6	8	14	12.2

accession year the aurei and denarii used a single reverse type from TRP II to TRP VI, but in TRP VII, the year when output was considerably increased, two additional reverse types were employed. In TRP VIII, VIII and X the volume of aurei and denarii seems to have dropped back to its original level, and one of the three types for aurei and denarii was dropped during the course of TRP VIII. In A.D. 65–66, immediately after the reform, there was an exceptionally large output of gold to replace the earlier aurei of the heavy pre-reform standard,<sup>13</sup> and during this period the aurei were struck in eight reverse types. Subsequently, however, the output of gold was considerably reduced and in Issues 2 and 3 two reverse types alone were employed. The undated denarii broadly followed the same pattern. In the undated denarius Issue 1 there were six substantive reverse types; but in Issues 2, 3a and 3b there were only two substantive reverse types at a time.

The *aes* coinage was confined to the later years of Nero's principate. It never displayed the wide fluctuations in volume that the gold and silver coinage did; but it shows equally clearly, for quite different reasons, that production at the mint was organized on the basis of its reverse dies, and that its reverse types can thus be regarded as the marks of distinct officinae. There is no obverse detail in any denominations which can satisfactorily be regarded as an officina mark. The two main groups with and without the globe are, as has been demonstrated, the issues of Lugdunum and Rome. The different representations of Nero's head as radiate, laureate or bare do not provide the basis for an officina distinction either. On dupondii Nero's head is sometimes laureate and sometimes radiate, but, except for the rare initial issues at both mints, Rome invariably used the radiate and Lugdunum the laureate head. On copper asses with SC Rome always used the laureate and Lugdunum the bare head. At Rome the bare head alone was used on the copper asses without SC and the radiate head was employed on some orichalcum asses, but each of these groups constituted a distinct issue at a separate date. At both Rome and Lugdunum, in fact, there was one representation, and one only, of Nero's head at any one time on

<sup>13</sup> See Table 6, p. 141 below.

each denomination in each substantive issue. The principal differences in obverse legends at both Rome and Lugdunum marked distinct chronological stages in the production of the coinage, as has been demonstrated above on independent grounds. Minor differences of obverse legend certainly existed in most issues, but in practically every case there is a single predominant form of obverse legend in any one issue and the other forms are comparatively rare variants. The extent to which these principal forms predominate is clearly shown by the evidence of site finds.<sup>14</sup> The rare variants of obverse legend certainly cannot have marked the operation of different officinae, for in that case the output of different officinae would have been badly disproportionate, whereas the whole object of an officina scheme must have been to divide the output of the mint into blocks of manageable and, no doubt, generally equal proportions.<sup>15</sup> In most *aes* issues Nero's head sometimes faces right and sometimes left; but this cannot be an officina distinction either, as the right-facing heads considerably outnumber the left-facing ones in any issue and on the gold and silver coinage right-facing heads alone are found.

The mint of Rome shows a recurrent pattern of two basic reverse types for every issue in most denominations,<sup>16</sup> and the statistical evidence of site finds shows that the total production in each issue is generally divided fairly equally between each of the two basic reverse types in each denomination. The asses are by far the most common denomination at Rome. The two basic types persist throughout each issue. Apollo and Genius were used in the issues of copper asses without SC, of orichalcum asses without SC and of orichalcum asses with SC and the mark of value. Victory and Janus temple were the two basic types for Nero's last three issues of copper asses from A.D. 65 to 68. Semisses at Rome were similarly issued in the

<sup>14</sup> The relative frequency of different Lugdunum varieties can be seen clearly in the finds from Mayenne and Condé-sur Aisne. *Bulletin de la Société d'Archeologie, Sciences, Arts et Belles Lettres de la Mayenne*, 1865, pp. 9ff. and *RN* 1968, pp. 76-132.

<sup>15</sup> This can certainly be accepted as a general principle in the organization of later officina systems. There is usually a good reason for the exceptional cases where the product of an officina is singularly rare. E.g. Officina Δ at Constantinople is rare for part of the reign of Theodosius I, no doubt because the coinage in the name of Maximus was suppressed.

<sup>16</sup> See p. 120.

two reverse types of seated Roma and the gaming table commemorating the Certamen Quinquennale. Although the dupondii had four distinct reverse types in the first three issues and the sestertii had a far wider range, both denominations were confined to the two basic reverse types of Roma and Janus temple in Issues IV, V and VI.

#### OFFICINAE AT ROME

Once it is recognized that the products of different officinae are distinguished by their reverse types, there is little difficulty in reconstructing the way in which the officinae were employed.

Nero's mint at Rome seems to have operated in a single officina from A.D. 54 to 60, in three officinae from A.D. 60 and in six officinae at the peak period of its production after A.D. 64. Moreover some of the officinae which produced gold and silver seem subsequently to have been used for the production of the *aes* coinage—an extremely interesting point which underlines the basic unity of the mint and should weigh heavily against the existence of two separate Imperial and Senatorial establishments in this period.<sup>17</sup>

Aurei and denarii of the same type were probably produced in the same officina. In most issues, after striking its quota of aurei, each officina apparently struck a parallel denarius issue. I have already pointed out that the gold and silver issues follow each other remarkably closely in the details of their obverse and reverse types and that the minor differences that can be noted are primarily chronological distinctions which suggest that the denarii in each issue were struck immediately after the aurei of similar type. There were three distinct aureus and denarius types in the accession year. From TRP II to TRP VI there was merely one reverse type of the corona civica. We can thus regard the precious-metal coins issued from TRP II down to TRP VI as the products of a single officina. In the course of TRP VII the output of gold (and silver) was greatly increased and the number of officinae was increased to a total of three. The two new types of Virtus and Ceres distinguish the two additional officinae, while the third new reverse type of Roma replaced that

<sup>17</sup> This reinforces the arguments in Chapter 4 against a dyarchic view of the coinage. Cf. K. Kraft, *JNG* 1962, pp. 7-49.

of the corona civica toward the end of the year, thus marking the continued operation of the first officina. During TRP VIII one officina ceased to strike in precious metals. In post-reform Issue 1, the undated gold and silver with IMP as a cognomen, three stages may be distinguished: 1a) with two substantive types in gold; 1b) with six substantive types in gold and silver; 1c) with two substantive types in gold and silver. We have traces first of two officinae as in the dated issue TRP X, then of an expansion to six officinae, and eventually a return to the earlier pattern of two officinae. Subsequent Issues 2, 3a and 3b each had two substantive reverse types only, and must have been produced by no more than two officinae.

As noted, the *aes* coinage at Rome seems to have been produced by officinae differentiated by their use of distinctive reverse types; and at most stages during these issues there were two basic, substantive reverse types in each denomination: sestertii; dupondii; asses and quadrantes. The *aes* at Rome, however, cannot have been produced in ten distinct officinae, two for each denomination, as the output of such officinae would have been very disproportionate in volume. But output would have been comparatively well balanced if the sestertii and dupondii were produced in two officinae and the asses, semisses and quadrantes in two more. At many points there is a remarkable parallelism between the reverse types of the sestertii and dupondii (as indeed we have already noted between the aurei and denarii) and the principal changes of obverse legend that defined the issues are common to both denominations. The sestertii and dupondii, moreover, were struck in orichalcum throughout, whereas the asses, semisses and quadrantes at Rome were struck first in copper, then in orichalcum, and finally (for the asses and quadrantes alone at Rome) once more in copper. The strongest argument, however, for this officina attribution is that it is the only logical division which gives each officina a reasonable share of work throughout the period of the issues. The copper asses with SC are by far the most common coins at the mint of Rome. While they were being struck in Issues IV, V and VI there was no issue of semisses or quadrantes at Rome, and the two officinae in question would have been able to devote their resources entirely to the production of these asses. Proportionately to the duration of the issue, orichalcum asses are



far less common than the copper ones and it was during Issue III, in which most of the orichalcum asses were struck, that the same two officinae would have also had to strike orichalcum semisses and quadrantes. In each issue the sestertii and dupondii appear to be equally common, and in Issues II and III each denomination is about as common as the orichalcum asses of the same issues.

An alternative possibility that must be considered is that in the sestertius and dupondius issues alternative forms of the principal reverse type (such as Roma with victory and spear in lieu of Roma with victory and parazonium in Issues IV and V) and subsidiary reverse types (such as Macellum in Issues II and III of the dupondii) marked the production of those denominations in that particular issue by additional officinae, which may have contributed a token quantity only and which were principally occupied with the issue of other denominations. Analysis of the sestertius types, however<sup>18</sup> reveals surprising variations in the total number of reverse types used in successive stages of each issue. It is most unlikely that these sharp changes can have reflected equally abrupt changes in the number of officinae at work in the mint, when there is a perfectly reasonable and sensible alternative explanation—that each officina used more than one reverse type. It is of course still possible to argue that sestertii (and dupondii) were struck by four not two officinae; but the relative volume of Nero's coinage in different *aes* denominations does not provide the positive support that one would expect on this hypothesis, and the present balance of evidence certainly seems to favor the alternative view—that subsidiary reverse types and alternative forms were used additionally by the two basic officinae responsible for issuing the denomination.

The various changes in the number of officinae responsible for the production of Nero's gold and silver are rather puzzling until it is realized that the mint must have switched its production capacity from gold and silver to *aes* and *vice versa*. *Aes* Issue I, consisting of the copper asses and semisses without SC, can be dated on independent grounds to the latter part of A.D. 62, which is just the point at which the output of officina 3 (striking the Ceres gold type)

<sup>18</sup> See *Cat.* 70–174.

seems to have been cut back sharply. *Aes* Issue II, the remainder of the *aes* without SC, has been attributed to A.D. 63 in the course of which officina 3 ceased striking in the precious metals.<sup>19</sup> *Aes* Issue III, the general orichalcum coinage which is the product of four officinae and marks a major expansion in mint capacity, belongs to A.D. 64 when the output of gold and silver was limited to two officinae. Early in A.D. 65 in undated Issue 1 b, when there were six officinae striking gold, we have the two original gold and silver officinae of Issue TRP X that had continued in undated Issue 1 a, supplemented by the four officinae that had coped with the general orichalcum coinage. At later stages of the *aes*, these four seem to revert once more to the production of *aes*.

Although the general principles and outline of this officina system is reasonably clear—that the coins from different officinae were distinguished by the use of distinctive reverse types—the detailed attribution of reverse types to their respective officinae is sometimes extremely difficult and, on our present knowledge, much of it must remain purely tentative. The mint must no doubt have kept a register in which it would record the reverse types allocated to different officinae, but it probably did not matter very much which types were attributed to an officina, so long as a note was kept in the central records. It is for example, reasonably clear that the asses were produced in two officinae at Rome, that the Apollo and Genius types differentiated the two officinae in Issues I, II and III, and the Victory and Janus temple types marked the officinae in Issues IV, V and VI; but there is apparently no means of determining whether the officina which originally struck the Apollo asses subsequently struck the Victory or the Janus temple type. It is especially difficult to attribute the wide range of sestertius types in Issues II and III to the two officinae in which they seem to have been struck. The more common types can be attributed to one officina or the other by the necessity of balancing output between parallel officinae at successive stages in the issues, and we can reasonably assume that once a reverse type was allocated to an officina that type and its subsequent modifications probably remained

<sup>19</sup> See Chapter 4.

the distinctive mark of that officina; but there is nothing to indicate the officinae in which the reverse types were struck. In two cases, however, minor details of type and of type development may give some indication of the way in which reverse types were probably associated with officinae. The Roma types of the later sestertii and dupondii sometimes carried a victory and the Roma types in both denominations may perhaps be regarded as the successors of the Victoria type on the earlier dupondii. The Apollo asses and Roma semisses were probably struck in the same officina as both types began with an anepigraphic form whereas the second As type of Genius and the second semis type of the Certamen Quinquennale both began with a full reverse legend. The detailed attribution of reverse types to their officinae can be expressed most clearly in tabular form.<sup>30</sup>

<sup>30</sup> In the table of officina types, I have excluded rare reverse types which were not struck in any number (those that do not constitute substantive varieties); and I have classified the minor varieties of a reverse type together under a general heading e.g. the various representations of Roma with different attributes have been classified together as "Roma."

TABLE 4. Officina Types of the Rome Mint

		Gold and Silver Reverse Types					
		<i>Offinae</i>					
<i>Issue</i>		1	2	3	4	5	6
<i>Pre Reform</i>							
TRP	Agrippina						
TRP II	Wreath						
TRP III	Wreath						
TRP IIII	Wreath						
TRP V	Wreath						
TRP VI	Wreath						
TRP VII	Wreath						
	Roma		Virtus	Ceres			
TRP VIII	Roma		Virtus	Ceres	<i>Aes</i> I		
				<i>Aes</i> I			
TRP VIII	Roma		Virtus	Ceres	<i>Aes</i> II	<i>Aes</i> II	<i>Aes</i> II
				<i>Aes</i> II	<i>Aes</i> III	<i>Aes</i> III	<i>Aes</i> III
TRP X	Roma		Virtus	<i>Aes</i> III			
<i>Post Reform</i>							
I a	Concordia		Janus	<i>Aes</i> III	<i>Aes</i> III	<i>Aes</i> III	<i>Aes</i> III
I b	Salus		Jup. Custos	Vesta	Roma	Aug. Augusta	Aug. Germanicus
I c	Salus		Jup. Custos	<i>Aes</i> IV	<i>Aes</i> IV	<i>Aes</i> IV	<i>Aes</i> IV
2	Salus		Jup. Custos	<i>Aes</i> V	<i>Aes</i> V	<i>Aes</i> V	<i>Aes</i> V
3 a	Salus		Jup. Custos	<i>Aes</i> VI	<i>Aes</i> VI	<i>Aes</i> VI	<i>Aes</i> VI
3 b	Salus		Standards				

Issue	Aes Reverse Types					
	Denomination	Officinas				
		3	4	5	6	
I. Copper denominations Without SC	Cu. As Cu. Sem Cu. Q	Apollo Roma Column	Genius Table			
II. General orichalcum coinage Without SC	Or. Sest Or. Dup			Annona Victoria l.	Decursio Macellum Securitas	
III. General orichalcum coinage SC and marks of value	Or. As Or. Q Or. Sest Or. Dup	Apollo Column	Genius	Annona Ostia Congiarium Victoria l. Victoria r.	Decursio Arch Macellum Securitas	
IV. Traditional denominations IMP as cognomen	Or. As Or. Sem Or. Q Or. Sest Or. Dup Cu. As Cu. Q	Apollo Roma Column Victory Column	Genius Table Owl Janus Owl	Roma Roma	Janus Janus	
V. IMP as praenomen	Or. Sest Or. Dup Cu. As	Victory	Janus	Roma Roma	Janus Janus	
VI. IMP as praenomen TRP XIII and parallel asses	Or. Sest Or. Dup Cu. As	Victory	Janus	Roma Roma	Janus Janus	

## OFFICINAE AT LUGDUNUM

The mint at Lugdunum seems to have been divided into four officinae on much the same basis as the mint of Rome, with two officinae sharing responsibility for the orichalcum denominations of sestertii and dupondii and two others sharing responsibility for the copper denominations of As and semis. There is a recurrent basic pattern of two principal reverse types in each issue of the dupondii and semisses, and the sestertius and As reverse types readily fall into the officina pattern suggested by the other two denominations. Throughout the issue of copper semisses there were only the two types of Roma and the Certamen Quinquennale and both types seem to have been struck in approximately equal numbers. In Issues L-IVB, L-V and L-VI there was a clear recurrent pattern of the two dupondius types of Victoria and Securitas; in Issues L-III and L-IVA there was a third dupondius type of the Macellum, but the Macellum and Securitas types together are no more numerous in those issues than the Victoria type alone, and the same officina was probably responsible both for the Macellum and Securitas types. Lugdunum continued to strike the Genius type concurrent with the new Victory and Janus temple types and added the peculiarly Lugdunum type of Ara Pacis. In the later issues the Victory type heavily outnumbers all the others, but in issues L-IVB and L-V the output of asses can be divided into two balanced groups by setting all the other types in one group and the Victory asses into the other. On the other hand the comparatively rare Janus temple asses at Lugdunum could be associated with the Victory group without greatly upsetting the balance. The sestertii at Lugdunum have almost as wide a range of reverse types as at Rome. They have been attributed here to two officinae on the same principles as the sestertii at Rome and with the same reservations. There was no abrupt or complete change in reverse type at Lugdunum as there was at the beginning of Issue IV at Rome, but there is the same uncertainty about the dupondius and sestertius types to be associated in the same officina, and about the As and semis types which should be associated.



## CONTROL OF OFFICINAE

The product of each officina at Nero's mints never constituted a distinct and compact die-linked group. In many issues all the reverse types of a denomination, including those which certainly marked the working of different officinae, are die-linked. The die links in Issues I and II at Rome have been noted in Chapter 4;<sup>21</sup> those in Issue L-III at Lugdunum have been noted in Chapter 6;<sup>22</sup> and examples of the sort of die linking that occurs among the sestertii in Issue III at Rome are in Appendix III.<sup>23</sup> The general pattern is very similar to the linking that Kraay has noted among the sestertii of Galba.<sup>24</sup> In most cases where dies are shared at the mint of Rome, there is no obvious trace of deterioration in the obverse dies. But at Lugdunum in Issue L-VI, where we can see the progress of a flaw in one obverse die, it is used with the two reverse types of the issue both before and after the flaw develops.<sup>25</sup> There are moreover similar links between the different reverse types of the gold and silver. In Issue 1 of the post-reform aurei, BM 52 with the Augustus Augusta type is struck from the same obverse die as BM 103 with the Vesta type. In Issue 1 of the post-reform denarii, BM 74 and 76 with the Jupiter Custos type are struck from the same obverse die as BM 83 with the Roma type.<sup>26</sup> But in other issues, such as the copper asses without SC of Issue I at Rome,<sup>27</sup> and the sestertii and dupondii dated TRP XIII of Issue VI at Rome,<sup>28</sup> die linkage is very limited; it is rare to find an obverse die used with more than one reverse die, and quite exceptional to find examples of obverse die linkage between the two parallel reverse types.

The pattern of complicated die linkage in some issues, between the reverse types that seem to mark different officinae, and the minimal die linkage in other issues, provides important evidence for the way

<sup>21</sup> See pp. 53, 62.

<sup>22</sup> See pp. 94, 98.

<sup>23</sup> See pp. 255-56.

<sup>24</sup> C. M. Kraay, *ANSNRM* 133, pp. 16 ff.

<sup>25</sup> See Chapter 7, p. 105.

<sup>26</sup> *BMCRE* I, p. 208.

<sup>27</sup> See Chapter 4, pp. 37-43.

<sup>28</sup> I plan to publish a die study of this issue in my forthcoming paper on "The Aes of Nero with Tribunician Dates."



in which minting operations were controlled. It seems legitimate to conceive that the obverse dies were returned at the end of each day's work to the safe custody of a central mint depository, while the reverse dies were kept in the narrower departmental custody of individual officinae. The following morning an official from each officina would draw obverse dies afresh from the central store and an officina might thus frequently strike with obverse dies which had previously been used in other officinae. But at some periods, when the obverse dies that had been returned were kept separately for each officina within the central depository, or were given a distinctive and recognizable marking, the particular obverse die might be issued repeatedly to the same officina and repeatedly employed on successive occasions with the same reverse die.

To explain die linkage between the marked officinae of the later Roman coinage Bastien<sup>29</sup> originally suggested that obverse dies developing a flaw had been returned to the central mint workshop, repaired and subsequently issued to another officina. Grierson<sup>30</sup> pointed out that in the 5th century obverse dies were still shared between different officinae in cases where they had become damaged, but had not been repaired. This led Sutherland to suggest an alternative hypothesis of the daily return of obverse dies to the central depository very similar to one that I had independently postulated to explain the pattern of die linkage under Nero. We thus seem to have a common pattern, reflecting the same basic mint practice that persisted through at least five centuries of operations at Roman mints.

Sutherland's explanation of the reasons for this procedure is that obverse dies were difficult to prepare and because they gave the coin its imperial authority they were particularly sacrosanct and must not be allowed to fall into the hands of unauthorized persons. But there is no positive evidence that security was any less vigorous for reverse than for obverse dies, and in the coinages of Nero the reverse dies are no less elaborate or difficult to engrave than the obverse ones. For the Julio-Claudian period at least, I would therefore prefer to explain the return of obverse dies after each day's

<sup>29</sup> *SM* Nov. 1960, pp. 75-77.

<sup>30</sup> *SM* July 1961, pp. 1-8.

work to the central depository as a clever administrative device to protect both the central mint administration and the departmental officinae masters. The central custody of the obverse dies, which normally have the emperor's titulature or portrait, would protect the government against any unauthorized coining in the emperor's name, and custody within each officina of its own reverse dies, which distinguished its product, would equally protect the officina master against any unauthorized coinage in their name. The purpose of the arrangement would in essence be similar to that of the locks on a mediaeval chest. Each of the two or three locks had a separate key. No single keyholder could open the chest, and business could only be conducted after each keyholder had opened his lock.

This method of controlling the work of officinae was not introduced by Nero, and it seems to have had its origin in the practice of the Republican period. Buttrey has shown that the striking of the Triumviral portrait gold of 42 B.C. was organized not by the obverse portraits of the Triumviri but by the reverse dies on which the moneyer's signature was placed;<sup>31</sup> and I have suggested that this arrangement had the specific purpose of protecting both mint and moneyers against unauthorized coining.<sup>32</sup> The moneyers of Augustus had of course placed their names on the reverse of the coins they struck, while the imperial titulature and sometimes the emperor's portrait was employed on the obverse. In the officina arrangement of Nero and the recurrent pattern of six officinae which emerges clearly at a later stage in the second and third centuries,<sup>33</sup> I would therefore see residual traces of the nominal spheres of responsibility exercised by the Tresviri Monetales;<sup>34</sup> and the fact that there were three magistrates may well explain why Nero's mint was expanded first into three and then into six officinae.

<sup>31</sup> T. V. Buttrey, Jr., *The Triumviral Portrait Gold of the Quattuorviri Monetales of 42 B.C.*, *ANSNM* 137 (New York, 1956), pp. 14 ff.

<sup>32</sup> See my review of Buttrey, *ANSNM* 137 in *NCirc* 1957, pp. 541-2.

<sup>33</sup> Cf. Carson, *Essays . . . Mattingly*, p. 239.

<sup>34</sup> Although the names of *tresviri* do not appear on the coinage after 4 B.C. the office attested by inscriptions into the third century. Cf. Lenormant, *La monnaie*, pp. iii, 185 ff.

## DIE ENGRAVING

From this system of controlling the output of the officinae, it follows that there must have been one common die engraving establishment for the production of obverse dies in each mint. For the reverse dies the evidence is less clear, but administrative convenience suggests that they too would probably be produced centrally at each mint and not under separate arrangements within each officina.

The coinage itself throws a most interesting light on the *imagines* or models used by the die engravers. The imperial portraits used as exemplars for the obverse dies must have been three dimensional representations. Right facing portraits on the undated gold and silver (e.g., PLATE I, 22 ff.) and on the *aes* (e.g., PLATE II, 71 ff.) show Nero's hair in the style described by Suetonius "in gradus formata."<sup>35</sup> But left facing portraits (e.g., PLATE II, 76) invariably show Nero's hair with downward curls in a fringe over his forehead. These two distinct forms are used concurrently at all stages of the *aes* issues and at both Rome and Lugdunum. Puzzled by the demonstrably contemporary use, Gabrici argued that one representation must be false and inaccurate and that there must have been two schools of artists at the mint, each following its own type of Nero.<sup>36</sup> But the extant sculpture heads of Nero suggest a simpler explanation.<sup>37</sup> Viewed from the front Nero's hair is shown combed over a frame with each curl curving to the left, and slightly covering the first part of the next curl to the left. In right profile, this arrangement of the curls gives an effect of the hair being arched up from the forehead—the "in gradus" effect of the right facing coin portraits. In left profile one merely sees the downward inclination of each curl, as on the left facing coin portraits. This is the clearest possible indication that the die engravers used three dimensional *imagines* as their models for the emperor's head.

Three dimensional models must also have been used for some of the reverse types. The two representations of Victoria walking left

<sup>35</sup> Suetonius, *Nero* 51. For the style cf. Ovid *AA* 1.507.3, 343 and Quintilian *Institutiones Oratoriae* 12.10.47.

<sup>36</sup> *RIN* 1897, pp. 285 ff.

<sup>37</sup> See PLATES XXIV and XXV.

(PLATE VII, 205) and walking right (PLATE VII, 200) on the dupondii at Rome are merely two views of the same figure from different angles. The three dimensional interest of the engravers is even betrayed in their treatment of architectural reverse types. The two representations of the Temple of Janus "with closed door left" (PLATE V, 171) and "with closed door right" (PLATE V, 165) are in fact two views of the same building. It is not easy to determine whether an architectural model was used or sets of drawings were made specially from the objects represented, but it is clear that considerable trouble was taken by the die engravers to reflect the character of the building.

#### ALIGNMENT OF DIES

From the die positions noted on Nero's regular *aes* coinages it is clear that fixed dies were used at both mints; but as there is evidence of heavy die linking among many groups of the coinage, the dies must have been slotted and not hinged. Otherwise dies could not have been used so freely in such combinations. Die positions do not vary greatly.  $\downarrow \uparrow$ ,  $\swarrow \uparrow$ ,  $\searrow \uparrow$  is the normal range. Minor differences in alignment between different pairs of dies are probably due to lack of care in determining the axis of the design. It is, for example, quite easy to give Nero an upward or downward gaze, and reverse types of this period do not usually have a distinct ground line. But it is highly significant that coins struck from the same pair of dies invariably have identical die positions, and brockage pieces have a correspondingly inverted one.

#### MINT INSTRUCTIONS

At the Roman imperial mints, as at all state mints, there must have been different levels of responsibility within the machinery of government; and at each level the administration must have enjoyed freedom of action within circumscribed limits. For the western mints of Nero we can now suggest with some confidence the scope of the authority and discretion allowed to various levels of the administration. We have distinguished the coinages of the two great western mints, the successive issues at each mint, and the features

that distinguish the product of the constituent officinae. We are therefore able to see which variations in the detail of the coinage are permitted in contemporary issues.

Decisions made centrally by the government and applied uniformly in contemporary issues at both mints cover the use of important elements of imperial titulature—of IMP as cognomen and after mid-66 the later change to IMP as a praenomen. In this, as in the tribunician dating, the mints must have followed general government instructions. These must also have covered the denominations to be struck, the employment of orichalcum for all *aes* denominations in A.D. 64/65, the addition of the mark of value to the dupondius and lower denominations, and the reversion to the earlier pattern of coinage in orichalcum for sestertii and dupondii with copper for the asses and semisses.

In some matters each mint is uniform in its own issues, but differs from the practice at the other mint. In these cases, decisions must have been made by each mint master for his own establishment. At each mint there is a characteristic form of obverse bust truncation, but whereas Lugdunum regularly has a characteristic truncation with a globe, Rome regularly has its own quite distinct form. Some *aes* denominations are differentiated by different types of imperial portrait, but the two mints do not follow the same practice. For dupondii the regular form is a radiate head at Rome, but a laureate head at Lugdunum; for asses it is a laureate head at Rome but a bare head at Lugdunum; and for semisses it is a laureate head at Rome but a bare head at Lugdunum. There is a similar difference between the mints in the use of reverse types. Although several of the Lugdunum forms are ultimately derived from a prototype at Rome, some such as the Ara Pacis are peculiar to Lugdunum, and others such as the Roma and Janus temple of the dupondii are peculiar to Rome. Even when the same reverse types are common to both mints, they are not used in the same way in contemporary issues at each mint. It is rather certain that some central government permission must have been sought for the use of particular types, but the permissions and instructions must often have been phrased in quite general terms which left considerable scope for mint masters to interpret them in different ways.

Within the general pattern of the coinage at each mint some further variations of detail seem to have a close chronological significance, like the use of the elongated bust truncation in Issues L-III and L-IV A, and the removal of SC to the exergue on *Securitas dupondii* for Issue L-VI. Both these forms are applied uniformly at the time and must have been the subject of directives from the mint master. But the great majority of minor variations seem to occur contemporaneously in the same issues, and the variant forms often continue in use side by side in several successive issues. Minor variants of obverse legend shortening

NERO CLAVD CAESAR AVG GER PM TRP IMP PP into

NERO CLAVD CAESAR AVG GER PM TRP IMP P and

lengthening

IMP NERO CLAVD CAESAR AVG GER PM TRP and

IMP NERO CAESAR AVG P MAX TRP PP into

IMP NERO CAESAR AVG P MAX TR POT PP

were certainly due to individual die engravers. Other variants again must have been merely slips or mistakes that passed unchecked, e.g., RMA for ROM on an orichalcum semis,<sup>38</sup> and  $\bar{\Pi}$  as the mark of value on an orichalcum As.<sup>39</sup> Individual engravers equally seem to have been responsible for the variant of right and left facing portraits which are found concurrently in all the *aes* issues. The direction of the head certainly has no chronological significance, and is unconnected with the officina organization, but the use of both right and left facing heads will have facilitated the work of a number of die engravers working from a limited number of sculptural *imagines*.

Altogether, from the multiplicity of these variants, we can piece together something of the practical working of the Roman imperial mint machinery, and distinguish not only the different types of instruction given, but also the scope for discretion allowed to the various officials charged with implementing them.

<sup>38</sup> *BMCRE* I, p. 252, 268.

<sup>39</sup> *Ex Nummis Historia* II, 542. There are other examples from the same reverse die in Copenhagen and the Hague.



## 9. CONTEXT OF THE CURRENCY CHANGES

### CHRONOLOGY OF THE INNOVATIONS

Most of the innovations introduced by Nero into the western coinage are well known. He reduced the gold and silver standard by reducing the weight of the aureus and by debasing the silver while reducing the weight of the denarius. He opened or reopened a branch of the western mint at Lugdunum. He omitted SC from a significant group of the *aes* coinage. And he introduced a general orichalcum coinage for all the *aes* denominations, at first without SC, but later with SC and distinguishing marks of value. Many numismatists have suspected that some of these measures were related, but the precise connection between them has hitherto remained obscure and the subject of conjecture. An equally important measure which has not hitherto been fully recognized was the reduction of the *al marco* standard of the *aes* denominations, by much the same extent as the reduction of the gold and silver standard.

The detailed analysis of Nero's gold and silver and *aes* coinages into their successive issues throws considerable light on the scope, context and duration of these measures. The reduction of the gold and silver standard had a lasting effect on the imperial coinage. All the subsequent gold and silver issues of Nero followed the reduced standard of the first undated issue; and the year of the reform eventually became a critical one in the circulation of gold and silver. The reduction in the *al marco* standard of the *aes* coinages, was never subsequently restored. All the later *aes* issues of Nero and subsequent emperors were struck to the reduced weight range. But as the *aes* was a token coinage and the new standard covered a range of weights which overlapped much of the weight range of the preceding standard, the measure did not materially affect the continued circulation of the earlier *aes* issues. The opening of the branch mint at Lugdunum was more ephemeral, but the issues continued throughout the later years of Nero, during the civil war and into the Flavian period. Previously the omission of SC has not been closely defined, but we



now know that the innovation was confined to Issues I and II of the *aes* at Rome. Moreover whereas Sydenham<sup>1</sup> thought that the general orichalcum coinage continued at Rome and was abandoned on the death of Nero, we now know that it was confined to Issues II and III of the *aes* at Rome. This in turn explains why there was no *aes* without SC at Lugdunum, and why there are so few orichalcum asses and semisses struck at Lugdunum. Production at Lugdunum only commenced right at the end of Issue III at Rome, some time after SC had been restored to the *aes* at Rome, and only just before the general orichalcum coinage was abandoned in favor of the earlier coinage pattern with asses and semisses in copper. From the interrelationships of these issues of gold, silver and *aes*, we can trace the relative chronology of Nero's currency innovations.

A.D. 62 — Copper asses and semisses without SC

Rome *aes* Issue I introduced during gold and silver issue TRP VIII

63 — General orichalcum coinage without SC

Rome *aes* Issue II introduced during gold and silver issue TRP VIII

64 — General orichalcum coinage with SC and marks of value

Rome *aes* Issue III introduced during the gold and silver issue of TRP X

Late 64 — Reduction of the gold and silver standard

Rome gold Issue 1a some time after gold and silver issue TRP X

Reduction of the *al marco aes* standard introduced during

Rome orichalcum As Issue III

Branch mint opened at Lugdunum

Lugdunum *aes* Issue L-III, just before the end of Rome orichalcum As Issue III

Early 65 — Extensive recoinage of aurei on reduced standard

Rome undated Issue 1b introduced in all officinae after general orichalcum coinage abandoned

Late 65 — Restoration of earlier Julio-Claudian *aes* denominations

Rome *aes* Issue IV

<sup>1</sup> Sydenham, *Nero*, pp. 22–23.

## REDUCTION OF THE GOLD AND SILVER STANDARD

The general character of Nero's measure has long been recognized. After the gold and silver issue dated TRP X, the weight of the aureus was reduced to 1/45th of a pound of gold<sup>2</sup> and of the denarius to 1/96th of a pound of silver,<sup>3</sup> and the silver content of the denarius was lowered by between 5 and 10%.

There has been considerable dispute about the motive for altering the weight standards. The reform has often been regarded as the device of a financially embarrassed administration when its resources had been depleted by the personal extravagance of the emperor, expensive foreign wars and the disastrous fire at Rome.<sup>4</sup> Soutzo, by contrast, suggested that the reform was an elaborate and ambitious scheme to unify the eastern and western coinages of the Empire.<sup>5</sup> It has also been argued that the reform was an attempt to adjust the coinage to the current market value of gold and silver, and that it was designed to check the export of silver out of the empire and ensure an adequate supply of coinage at home:<sup>6</sup> and West has reminded us that the debasement of the silver may merely have been an attempt to improve the wearing quality of the metal.<sup>7</sup>

The reduction of the gold and silver standards must be placed after the issue of aurei and denarii struck on the old standard and dated TRP X (December A.D. 63/64). TRP X was a full issue in Nero's dated series, and its coins are as common as those of any other previous year of the dated coinage.<sup>8</sup> Moreover, between the latest coins struck on the old standard and the earliest undated ones of the reduced standard there is a remarkable break. The portraiture on the new coins (PLATE I, 22 ff.) is more developed and realistic, their conception and style are more inspired and vigorous and they have

<sup>2</sup> Pliny, *NH* 13.3.13.

<sup>3</sup> *BMCRE* I, pp. xlv-xlv.

<sup>4</sup> Cf. Grant, *Roman Imperial Money*, pp. 247-8.

<sup>5</sup> M. C. Soutzo, "Étude sur les monnaies impériales romanes II. Le Système monétaire de Néron," *RN* 1898, pp. 659-66.

<sup>6</sup> T. L. Compurette, "Debasement of the Silver Coinage under Nero," *AJN* 1913, pp. 131-41, and Mattingly *Roman Coins*, pp. 124-5.

<sup>7</sup> L. C. West, *Gold and Silver Coin Standards in the Roman Empire*, *ANSNM* 94 (New York, 1941), pp. 56f.

<sup>8</sup> See the numbers in the Pudukota hoard *NC* 1898, pp. 304-20.

few points in common with the dated coins of the earlier series (PLATE I, 13-20).

During the fifty years between A.D. 14 and the year of the reform there had been some slight modification in the weight standards of both the gold and silver at Rome. The standard of the aureus had been reduced by steady but slight and almost imperceptible changes. Pliny's explicit statement,<sup>9</sup> "Postea placuit xxxx signari ex auri libris paulatimque principes inminuere pondus et novissime Nero ad xxxv," has been fully confirmed by the weights of surviving specimens. A frequency table of aureus weights (Appendix II, Table 1) shows a point of concentration at 7.8 gm. for Tiberius, 7.7 gm. for Gaius and Claudius, and 7.6 gm. for the pre-reform period of Nero. The total reduction, however, of the aureus weight standard in the fifty years between the accession of Tiberius and the tenth tribunician year of Nero did not amount to more than this slight 0.2 gm. During the same period there had also been some significant alterations in the weight standard of the denarius. Denarii in the British Museum have an average weight of 3.75 gm. under Augustus, dropping to 3.65 gm. under Tiberius but subsequently rising to 3.69 gm. under Gaius and 3.75 gm. under Claudius. Then in the pre-reform period of Nero the average drops back sharply to 3.54 gm.<sup>10</sup> The same trends can be seen in the frequency table of denarius weights. (Appendix II, Table 2).

There is no reason to doubt the established view that these fluctuations in the denarius weight standard reflect an attempt by the mint to adjust the relative weights of the aureus and denarius to the changing relative values of gold and silver on the open market.<sup>11</sup> *Prima facie* it would seem that the gradual and slight reduction in the aureus weight standard was designed to serve the same purpose; and West has used these data to calculate that the ratio of gold to silver was 1:11.82 under Tiberius, 1:11.94 under Gaius, 1:12.33 under Claudius dropping back to 1:11.66 in the pre-reform period of Nero.<sup>12</sup> It is, however, far from clear why the mint should have

<sup>9</sup> Pliny, *NH* 13.13.47.

<sup>10</sup> *BMCRE* I, p. lii.

<sup>11</sup> West, *ANSNM* 94, p. 56.

<sup>12</sup> West, *ANSNM* 94, p. 8.

found it necessary to reduce the weights of both aureus and denarius merely to keep pace with the changing values of gold and silver as bullion. Even if the mint desired to maintain a perfectly balanced bimetallism, it could easily have countered a drop in the relative value of silver and conversely, when the relative value of silver rose, the easiest course would have been to lower the weight of the denarius—leaving the weight standard of the aureus constant in both cases. If the relative price of silver rose during the early years of Nero and the mint was merely anxious to maintain a closely balanced bimetallism it is very strange that the mint should have continued a policy of gradually reducing the aureus weight, because this would inevitably necessitate an even greater reduction in the denarius weight.

Mommsen's view that the gradual reduction of the aureus weight represented a measure of illegal profit for the mint officials is equally unconvincing.<sup>13</sup> The policy of gradual reduction was in fact a regular and long continued one which was pursued again after the reform of Nero, and it is far more likely that the profit benefited the government. The government can, however, probably be absolved from any fraudulent intent, as its policy seems to have been designed primarily to ensure that the weight of new aurei minted each year was not materially higher than the average weight of the aurei of previous emperors still remaining in circulation. The total reduction in the weight of the aureus between A.D. 14 and 64 did not amount to more than 0.2 gm.—and this is just about the loss in weight due to wear that one might expect after an aureus had circulated for about a half century. For example, Nero's undated aurei both<sup>14</sup> in the 1927 Rome hoard and in the Liberchies hoard<sup>15</sup> seem to have lost about 0.3 gm. in a century of circulation. Their weights show a clear point of concentration at 7.0 gm. whereas the point of concentration for well preserved undated aurei of Nero is 7.3 gm. The same device of gradually reducing the weight standard of the aureus was employed again in the period after the reform. West's frequency

<sup>13</sup> Theodor Mommsen, *Histoire de la monnaie romaine* 3 (Paris, 1873), pp. 23 ff.

<sup>14</sup> S. L. Cesano, "Ripostiglio di aurei imperiali rinvenuto a Roma," *Buletino della Commissione Archeologia Comunale di Roma* 1930, pp. 14, 83–5.

<sup>15</sup> M. Thirion, *Le trésor de Liberchies. Aurei des I<sup>er</sup> et II<sup>e</sup> siècles* (Brussels, 1972).

tables clearly show that, except for Domitian's unsuccessful attempt to return to the old Julio-Claudian standard, the aureus weight again dropped regularly though almost imperceptibly.<sup>16</sup> The general success of this monetary policy is well demonstrated in the remarkably close range of the weights of aurei of different emperors in hoards that cover a fairly long period.

Nero's alteration in the aureus weight standard was quite different in kind from the gradual reduction that had taken place in the earlier Julio-Claudian period. His undated aurei show a distinct point of concentration at 7.3 gm.—0.3 gm. lower than the point of concentration of the aurei of the immediately preceding issue dated TRP X, and, so far as can be ascertained, 0.3 gm. lower than the average weight of the aurei of Tiberius, Gaius and Claudius that still remained in circulation at the time of the reform. The undated aurei were struck on a fairly close standard. There is certainly no evidence for the secondary point of concentration at 108 grains (7.0 gm.) which West has shown in his frequency table. He has unfortunately included there the weights of a large number of worn aurei from the 1927 Rome hoard, and this distorts the point of concentration. The reform thus meant that the vast majority already in circulation contained about 0.3 gm. more than the new aurei to which they were, apparently, nominally equal in value. The old coins would in fact have contained about 1/25th or 4% more gold than the new aurei of the reformed standard.

The sudden lowering of the weight standard did not immediately drive the earlier and heavier aurei out of circulation. Throughout the Flavian period, they are still to be found in hoards, presumably because their bullion value did not yet exceed their nominal value;<sup>17</sup> but they do seem to occur less commonly in *normal* circulation. The mint certainly seems to have made a resolute effort to replace as much as it could of the earlier and heavier gold coinage by freshly minted aurei struck on the new and lower standard; and there were very large issues of aurei in the year of the reform. The maximum

<sup>16</sup> West, *ANSNM* 94, pp. 17–19.

<sup>16</sup> Cf. the weights of coins throughout the 1927 Rome hoard.

<sup>17</sup> As Sture Bolin points out in *State and Currency in the Roman Empire* (Stockholm, 1958), Chapter 4.

period for the issue of Nero's undated aurei was less than four years; but almost 90% of them were issued before mid-A.D. 66 when Nero assumed the praenomen *imperator*, and little more than 10% can be attributed to the last two years of his principate (A.D. 66–68). In the hoards of Flavian and later date there is a remarkably large number of Nero's post-reform aurei compared with the issues of the eleven years of the principates of Vespasian and Titus. In an analysis of Flavian gold hoards<sup>18</sup> I have noted 180 aurei from the eleven years of the principates of Vespasian and Titus compared with 81 undated aurei of Nero; and no less than 70 of Nero's aurei were struck in the year and a half that followed the reform. There is no reason why a hoarder should prefer Nero's post-reform aurei to those of Vespasian and Titus. Both groups were struck in equally fine gold on the same weight standard—the weights of each show a clear point of concentration at 7.3 gm. The inevitable conclusion is that issues of Nero's undated aurei before mid-A.D. 66 were much more extensive than in any comparable period during the principates of Vespasian and Titus. Coins from the 1927 Rome hoard plotted against the years in which they were issued (Table 6) suggest that the output of aurei immediately after the reform must have been about nine times greater than in any other single year during the period (i.e. an annual rate about six times greater).

The reform of the silver took place at the same time as the alteration in the weight standard of the gold and must have been part of the same general measure. Issues of denarii are closely parallel to those of the aurei in both the dated and undated series. The proportional reduction in the bullion value of the denarius was very similar to the contemporary reduction in the real value of the aureus, and ultimately the year of the reform was a critical date in hoards of both aurei and denarii. But, at the time the reform of the silver seems to have been regarded as quite secondary. Mattingly suggested<sup>19</sup> that Nero may have called in the old silver coinage in A.D. 65; but unlike the aurei there is no indication of any replacement of earlier denarii by large issues of fresh coin on the new standard until the middle years of Vespasian. Hoards of post-reform denarii

<sup>18</sup> In a study of the circulation of gold under the early empire—now in draft.

<sup>19</sup> Mattingly, *Roman Coins*, p. 186.

contain comparatively few coins of Nero compared with those of Vespasian and Titus. In the Reka Devnia hoard<sup>20</sup> there are 102 post-reform denarii of Nero, an annual average of 25, but 2,174 denarii of Vespasian and Titus, an annual average of about 200. From the Falkirk hoard<sup>21</sup> it is clear that the exceptionally large issue is that of Vespasian in A.D. 75; and this strongly suggests that the heavier denarii of the early empire were replaced not under Nero but under Vespasian.<sup>22</sup>

#### RELATION WITH EASTERN SILVER COINAGES

One result of the change in the denarius weight standard in A.D. 65 was that the eastern silver coinages enjoyed a more favorable relationship with the Roman denarius. Mattingly has argued against this, on the grounds that the eastern provincial silver suffered a corresponding reduction, but although some adjustments were made to the eastern silver coinages at the end of Nero's principate, they were not so drastic.

After regular yearly issues of tetradrachms at Antioch from A.D. 59/60 there was an abrupt break after the issue dated A.D. 63/64,<sup>23</sup> just at the time of the gold and silver reform at the mint of Rome. This break coincides with the close of the war in the east, and the end of the immediate need for additional currency in Syria to make war payments. When the issue of tetradrachms was resumed in A.D. 68 the denomination was struck to a weight standard that was virtually the same as that used before A.D. 64. The single tetradrachm quoted by Wruck for A.D. 68 has a weight of 14.40 gm.—a mere 1% less than the 14.53 gm. which he gives as the average weight of 66 tetradrachms of Nero's earlier period.<sup>24</sup> It can be seen from

<sup>20</sup> N. A. Mouchmov, *Le trésor numismatique de Reka-Devnia* (Sofia, 1934).

<sup>21</sup> NC 1934, pp. 1-30.

<sup>22</sup> There is further evidence of such a Flavian review of earlier silver in the rare countermarks  $\overline{\text{MP}}$   $\overline{\text{VES}}$  and  $2 \overline{\text{E}}$   $\overline{\text{QM}}$  on worn Republican denarii in the middle Danubian provinces (cf. M. Bahrfieldt, "Contremarken Vespasians auf Römischen Familiendenaren," *ZNum* 1876, pp. 354-74; *ZNum* 1887, pp. 67-74). The denarius of Vespasian dated COS V with this countermark in Oxford gives A.D. 74 as the *terminus post quem* for its application.

<sup>23</sup> Wruck, *Die syrische Provinzialprägung*, p. 182.

<sup>24</sup> Wruck, *Die syrische Provinzialprägung*, p. 87.

TABLE 6. Post-Reform Aurei in the 1927 Rome Hoard

*Plotted by Issues*

NERO—IMP

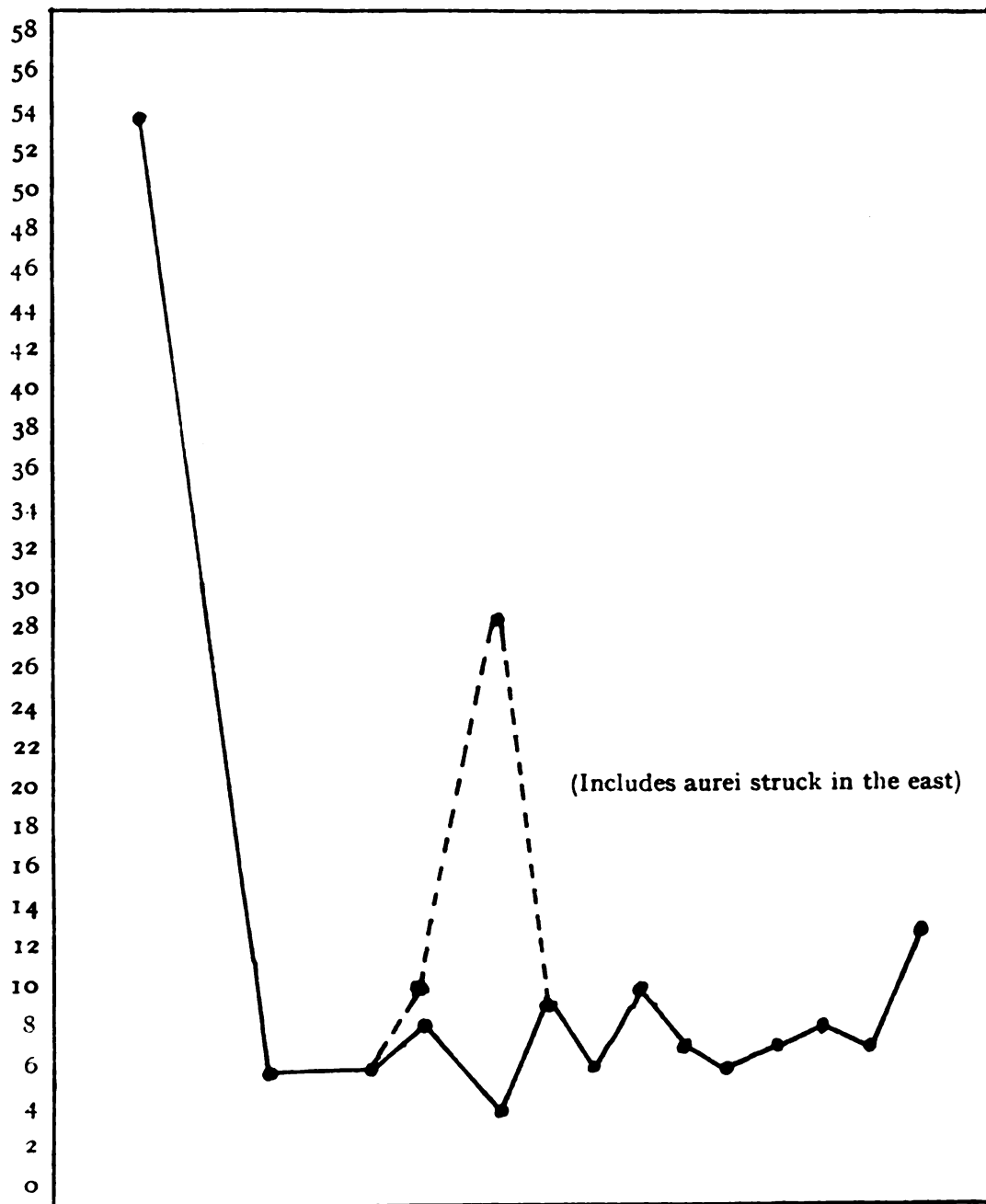
*As Cognomen* 66/67 67/68 68/69 70 71 72 73 74 75 76 77 78 79



Table 3 in Appendix B that the weight range of the tetradrachms of Galba and Vespasian is only 0.2 gm. or 1.3% lower than the earlier Nero tetradrachms, compared with the reduction of about 5.4% in the weight range of the denarius in A.D. 65. Spectrographic analysis,<sup>25</sup> moreover, has shown that the proportion of silver in the Antioch tetradrachms remained unchanged. Coins of Vespasian contain 90% silver as do the early tetradrachms of Nero, whereas the silver content of the Roman denarius was reduced by between 5 and 10%. There is no suggestion in hoards that A.D. 65 was a critical year for the circulation of Antioch tetradrachms, as it proved to be ultimately for the Roman denarius. In the Tyre hoard,<sup>26</sup> buried during the Flavian period, there were 32 early tetradrachms of Nero out of the 38 imperial tetradrachms that it contained; all the imperial denarii in the hoard from Eleutheropolis<sup>27</sup> were post-reform coins, but 11 of the 28 Antioch tetradrachms were issued before A.D. 65; the fifth Dura hoard,<sup>28</sup> which had imperial denarii from the reform to the time of Commodus, had 5 early tetradrachms of Nero; and 3 of the 28 tetradrachms in the Nineveh hoard<sup>29</sup> were struck in A.D. 59/60, 62/63 and 63/64, whereas its Roman denarii range from Galba to Geta as Caesar.

The weight standard of the drachm at Caesarea in Cappadocia was reduced slightly after A.D. 64 and its silver content also was slightly lowered, but its circulation does not appear to have been affected by these changes. Table 4 in Appendix II shows that the weights of Vespasian's drachms range from 3.3 to 3.6 gm. whereas those of Nero before A.D. 65 range from 3.4 to 3.7 gm. This difference of 0.1 gm. represents a weight reduction of about 3%. Earlier drachms of Nero contain about 67% silver, whereas those of Vespasian contain only 60%.<sup>30</sup> It is interesting to note that there is

<sup>25</sup> See the analyses in Appendix A.

<sup>26</sup> S. P. Noe, *A Bibliography of Greek Coin Hoards*, *ANSNM* 78 (New York, 1937), 1142. These coins were sold at Sotheby's on March 26, 1888 (*Sale Cat.*, pp. 24-25).

<sup>27</sup> J. N. Svoronos, *JIAN* 1907, pp. 230-52.

<sup>28</sup> E. T. Newell, *The Fifth Dura Hoard*, *ANSNM* 58 (New York, 1933).

<sup>29</sup> *NC* 1931, pp. 160-70.

<sup>30</sup> See the analyses in Appendix I.

no indication of any break at A.D. 65 in the only large hoard of first century silver from Cappadocea that has been recorded so far—the hoard found ca. 1906 at Caesarea which contained local silver from Tiberius to Hadrian.<sup>31</sup>

The differing extent of these changes in the silver coinages at Rome, Antioch, and Caesarea were:<sup>32</sup>

	NERO PRE-A.D. 65			POST-A.D. 65 NERO AND VESPASIAN		
	<i>Weight Standard</i>	<i>Silver Per Cent</i>	<i>Silver Content</i>	<i>Weight Standard</i>	<i>Silver Per Cent</i>	<i>Silver Content</i>
Denarius, Rome	3.7 gm.	99	3.67 gm.	3.5 gm.	93	3.26 gm.
Drachm, Antioch <sup>33</sup>	3.7 gm.	90	3.37 gm.	3.65 gm.	90	3.27 gm.
Drachm, Caesarea	3.7 gm.	67	2.41 gm.	3.6 gm.	60	2.16 gm.

It will be noted that the post-reform silver content of the drachm at Antioch was made virtually the same as that of the denarius at Rome, and this was no doubt a decisive factor in securing the free circulation of the post-reform denarius in the east—a free circulation that can be seen in the finds at Antioch<sup>34</sup> and Dura-Europus<sup>35</sup> and in the hoards from Eleutheropolis and Nineveh.<sup>36</sup> The silver content of the drachm at Caesarea was similarly adjusted at the time of the reform to bring it in line with that of the denarius, but it only amounted to two-thirds of the silver content of the denarius. Unless the Caesarean drachm was overvalued in relation to its bullion

<sup>31</sup> Agnes Baldwin, "Un trésor monétaire découvert à Césarée en Cappadoce," *Arethuse* 1927, pp. 145-72.

<sup>32</sup> These figures are based on the analyses in Appendix I.

<sup>33</sup> The figures for the theoretical drachm at Antioch are quoted to make comparison easier with the Roman denarius and Caesarean drachm. They are simply the weights, etc., of the tetradrachm divided by four.

<sup>34</sup> D. B. Waagé, *Antioch-on-the-Orontes* IV, Pt. 2 (Princeton, 1952), pp. 93 ff.

<sup>35</sup> A. R. Bellinger, *Excavations at Dura-Europos* VI, *The Coins* (New Haven, 1949), pp. 30 ff.

<sup>36</sup> See notes 29 and 31 above.

content by 50% more again than the Roman denarius—which in itself is most unlikely—we can hardly escape the conclusion that it circulated with the denarius in the relation of 3:2.<sup>37</sup>

#### THE GENERAL ORICHALCUM COINAGE

Nero's experiment omitting SC from Issues I and II of the *aes* at Rome has already been discussed. His other significant experiment with the *aes* was the introduction of the general orichalcum coinage at Rome in Issues II and III. Earlier in the Julio-Claudian period sestertii and dupondii alone had been struck in orichalcum. In these issues however Nero also struck asses, semisses and quadrantes in orichalcum. Orichalcum was regarded as a more valuable alloy than copper, the usual ratio being about 8:5.<sup>38</sup> This had meant that the copper As under Tiberius had been struck to a standard of about 11 gm., while the orichalcum dupondius, a coin double its value, had been struck to standard of about 14.5 gm. These denominations now struck for the first time in orichalcum by Nero—the asses, semisses and quadrantes—were principally struck at the mint of Rome and mostly circulated in Italy. There is no evidence to support the suggestion that the orichalcum asses, etc. were designed for circulation in the east;<sup>39</sup> and there are no asses or lower denominations in copper that can be attributed to the mint of Rome during the period when these denominations were being struck in orichalcum.

The sestertii and dupondii of the general orichalcum coinage were struck to the weight standard that had been used by Claudius, with the dupondius weight (15–17 gm.) slightly higher than one half that

<sup>37</sup> The normal equation of the drachm of Caesarea and the Roman denarius has been based on Sydenham's interpretation of  $\frac{AC}{IT} \overline{KA}$  and  $\frac{AC}{IT} \overline{IB}$  on some unusual silver coins of Caesarea as 12 and 24 Italian *asses* in *Caesarea in Cappadocia*, pp. 4–5, 38–40. Their silver content is, however, approximately equal to a silver quinarius and denarius respectively; and their signs of value can equally well be 12 and 24 assaria (=  $\frac{1}{2}$  and 1 denarius).

<sup>38</sup> *BMCRE* Intro., p. xlvii.

<sup>39</sup> Sydenham, *Nero*, p. 16 following in part the idea of Soutzo, *RN* 1898, pp. 659–66.

of the sestertius (26–30 gm.). The earliest orichalcum asses (8.5–9.5 gm.) were similarly slightly heavier than half the weight of the dupondii. But, even so, the orichalcum asses were much lighter than the preceding copper asses (10.5–12.5 gm.). The great advantage to the mint was that for the expenditure of a given quantity of copper it was able to produce far more asses, semisses and quadrantes in orichalcum than if it had struck the same denominations in pure copper.

Soutzo has argued<sup>40</sup> that Nero's orichalcum coinage was part of a general measure to unify the structure of coinage throughout the empire. He believed that the Roman system, previously quite independent, was adapted to that of the Greek coinage, with proportional values that could easily be related. As noted above, this was certainly one of the results of the reduction of the silver standard, even though it was not apparently the primary purpose of the measure. There are, however, serious difficulties in reconciling Nero's new orichalcum coinage at Rome closely with the various *aes* systems current in the Greek cities of the east; and as Sydenham points out,<sup>41</sup> the elaborate statistics of coin weights tabulated by Soutzo deviate considerably from the actual weights of the coins as we know them. But we now know that the denominations in brass at Corinth during the early Julio-Claudian period were in fact known as *As*, *semis* and *quadrans*,<sup>42</sup> and their weights cover much the same range as the same denominations at Rome in Nero's general orichalcum coinage. The names of the denominations at Antioch have not yet been recovered, but we do know that brass was used for coins of large, medium and small sizes. So that even though a precise correlation between the metrology of all the coinages cannot be successfully claimed, there can be little doubt that the basic idea of providing all the token *aes* in brass came from the east, and to this extent Soutzo is vindicated, even though the introduction of the general orichalcum coinage can no longer be regarded as the complementary part of the gold and silver reform.

<sup>40</sup> *RN* 1898, pp. 659–66.

<sup>41</sup> Sydenham, *Nero*, pp. 19 ff.

<sup>42</sup> D. W. MacDowall, *NC* 1962, pp. 113–23.

## REDUCTION OF THE AL MARCO AES STANDARD

The relative sequence of Nero's measures reinforces this interpretation. The general orichalcum coinage was first introduced in A.D. 64. The reduction in the gold and silver standard did not occur until the end of that year, and was itself paralleled by a comparable reduction in the *al marco* standard of the *aes*, during the course of *aes* Issue III at Rome, toward the end of the general orichalcum coinage.

Whereas the Roman imperial gold and silver was struck *al peso*, so that changes in the weight standard were immediately noticeable, the *aes* denominations were struck *al marco*, and the weights of a denomination in any given issue cover quite a wide range. The spread of weights in fact tends to obscure changes in metrology introduced by the mint; and as the *aes* was largely a token coinage providing the small change for the gold and silver, these adjustments in weight hardly ever affected the circulation of an *aes* denomination. But when a sufficiently large number of coin weights are plotted in a frequency table there is no difficulty in determining the normal weight range for an issue, and by plotting the weights of successive issues, we readily see the changes in the *al marco* standard.

It will be seen from the frequency table of the sestertii and dupondii (Appendix B, Table 5) that the range of weights in Issue II, when Nero introduced the general orichalcum coinage, is much the same as under Claudius; in Issue IV, after Nero abandoned the general orichalcum coinage, the range of weights is appreciably lower; and in Issue III, the general orichalcum coinage with SC, the weights cover both ranges. This clearly suggests that the reduction in weight standard took place in the course of Issue III. The order of the reduction for the dupondius is from ca. 16 gm. to ca. 14 gm.—about 10%. There are comparable changes in metrology during the course of successive issues of the orichalcum asses (Appendix B, Table 7.).

There is also a comparable reduction in the range of weights of the copper asses at Rome, between Issue I (before the general orichalcum coinage was introduced) and Issues IV and V (after the general orichalcum coinage had been abandoned). Issue I ranges from

10.5 to 12.5 gm. whereas Issues IV and V range from 9.5 to 12.0 gm.—a reduction of between 5 and 10%.

#### PURPOSE OF THE CURRENCY CHANGES

The key to the interpretation of Nero's measures is to be found in the different ways in which the mint dealt with the gold and silver and *aes*.

The general orichalcum coinage was indeed an imaginative project, suggested by the pattern of imperial coinage in the east. But it was introduced without any alteration to the gold and silver standard, and was not an ancillary part of a gold and silver measure. When the gold and silver standard was subsequently reduced, the *al marco* standard of the *aes* was reduced *pari passu*. The experiment of the general orichalcum coinage was ultimately abandoned when the authorities found it necessary to devote the production of all six officinae at Rome to the recoinage of gold on the reduced standard; and this emergency was the occasion when the branch mint at Lugdunum was reopened.

The parallel reduction of the gold and silver content of the coinage clearly rule out the suggested explanation that the chief purpose of that measure was to adjust the relative gold and silver content of aureus and denarius to the current relative values of the metals on the open market. Had this been the aim, there would have been no need to reduce the precious metal content of both denominations. And although the measure certainly ensured a better relationship between the denarius and the eastern silver, this cannot have been its sole or principal purpose. This aim could have been achieved more easily by improving the quality of silver at Antioch and Caesarea, or by an official exchange rate, measures which would have avoided the awkward necessity of recoinage of the existing gold in a very short time.

The hurried recoinage of a significant part of the gold currency already in circulation is perhaps the most remarkable feature of Nero's action in A.D. 65. Although the gold and silver standards were reduced at the same time, and the standard of the *aes* was adjusted to follow them, during the initial year of the changed

standards the mint noticeably concentrated its resources on the gold recoinage. It was content to leave the replacement of pre-reform silver until the middle years of Vespasian. The reason for this can only have been the large profit to be made from recoinng the gold. From the bullion of every 25 old aurei, the mint could produce 26 new ones, and enjoy a profit of 4 to 5%, i.e. about one denarius for each gold coin processed; and it seems to have been able to recoin a large number of the aurei already in circulation.

But the mint paid a heavy penalty for its hurried recoinage of the gold. It was forced to abandon its apparently successful introduction of a general orichalcum coinage, because the productive capacity of the mint was needed for more urgent work. When the coinage of *aes* was resumed at Rome, the mint did not return to the general orichalcum coinage, but reverted to the earlier Julio-Claudian pattern with sestertii and dupondii alone in orichalcum, and with the asses, semisses and quadrantes in copper. It is not difficult to suggest why this should have been so. The continuation of the general orichalcum coinage would have involved the recoinage of all the existing copper asses, semisses and quadrantes, and after the changes in the gold and silver denominations, the mint must have been anxious to avoid such an enormous undertaking. The mint had already tackled the replacement of the heavier aurei, and must have been in a good position to make a practical assessment of the problems of recoinage. It still had to face the replacement of the pre-reform silver, a far larger operation than the replacement of the pre-reform gold in view of the larger number of denarii in circulation; and it did not manage to tackle the replacement of the silver resolutely until the middle years of Vespasian. In the later years of Nero there must have been quite a shortage of small change in Gaul, Britain and the Rhineland, where copies of Claudian and earlier *aes* are commonly found; and the return to the existing pattern of currency would enable the authorities to devote their resources to meeting these needs, without the additional problem of replacing all the existing copper denominations.

The sudden interruption of the carefully laid plans for the general orichalcum coinage suggests a situation of some emergency, and from what we now know of the chronology of Nero's measures, there

is no difficulty in identifying what the emergency must have been. The profit from the gold recoinage was reaped at the end of A.D. 64 and during A.D. 65, the period that followed the Great Fire at Rome of July 64.<sup>43</sup> This disaster had added another unexpected burden on the finances of the empire, at a time when resources must have already been depleted by the ambitious projects of Nero and by prolonged warfare in Britain and Armenia. Of the fourteen districts of the city, three had been leveled to the ground, and in seven others only shattered half-burnt relics of houses remained. Nero raised temporary buildings to house the homeless, brought supplies of food from neighboring towns, and reduced the price of corn. In his rebuilding plans, no expense was spared. He built himself a magnificent palace out of the ruins. He promised to erect colonades at his own expense in front of the blocks of tenements; and he offered rewards proportionate to each person's position and property which they were to obtain on the completion of so many houses or blocks of buildings. Tacitus describes how Italy was thoroughly exhausted by contributions of money, and the provinces were ruined. Even the gods fell victims to plunder, for the temples in Rome were despoiled and images of deities were seized in Asia and Achaëa.<sup>44</sup>

The interval between the Great Fire in July 64, and the reduction of the gold and silver standard with its profitable recoinage of the gold is indeed just the interval that one would expect before the administration could assess the full extent of the increased financial burden it would have to face and could devise and implement measures to meet it. It therefore seems impossible to avoid the conclusion that the reduction of the gold and silver standard under Nero was a direct consequence of the Great Fire at Rome in A.D. 64; and that a calculated devaluation of the real worth of the coin denominations then in circulation was one of a variety of measures to raise funds for Nero's depleted treasury. To this extent, the analysis and arrangement of the coinage into its successive issues can throw light on the disputed motives of a complicated set of monetary measures.

<sup>43</sup> Tacitus, *Annals* 15.38. ff

<sup>44</sup> Tacitus, *Annals* 15.45.





## 10. IN CONCLUSION

Perhaps the most interesting and significant conclusion to be drawn from this analysis is the orderly and essentially simple administrative framework responsible for producing the coinage. The western coinages of Nero are extremely rich and varied; but from the multiplicity of types and varieties we can now trace with reasonable confidence the significance of the major component elements.

The product of the branch mint at Lugdunum is clearly distinguished by a deliberate and characteristic form of bust truncation and the unmistakable Lugdunum globe. The products of each of the *officinae*, the administrative sub-divisions of both the mint of Rome and the mint of Lugdunum, were distinguished by the orderly use of characteristic reverse types, which were regularly and systematically changed. But perhaps the most impressive feature of the whole coinage is the extremely orderly way in which it can be classified into distinct issues. In this study the various issues of gold, silver and *aes* have been distinguished by objective criteria, set in their relative sequence on the evidence of internal and progressive development, and related to those of the issues that have a tribunician date.

It should not pass unnoticed that this independent arrangement falls naturally into a clear pattern of one major *aes* issue for each year from A.D. 62 to the end of Nero's principate. The issues of gold and silver also fall naturally into one major issue for each year, except for the period between A.D. 64 and 66; and even in this highly exceptional period there remain traces of the same regular and recurrent pattern of issues—with a distinguishable stage for each year. Throughout the whole coinage we can see links between related denominations, at least between aurei and denarii, between sestertii and dupondii and between asses, semisses and quadrantes. As a result we can be reasonably precise about the dating of issues even when they are actually undated. Technically the tribunician

dates of Nero run from 10th December in each year; but his coin issues seem to be related to the annual tenure of office by the responsible magistrates—the tresviri monetales rather than to the renewal of the emperor's tribunicia potestas. They are therefore dated by the calendar years with which the tribunician datings largely coincided.

A.D.	GOLD AND SILVER		AES	
	<i>Dated Issues</i>	<i>Undated Issues</i>	<i>Dated Issues</i>	<i>Undated Issues</i>
54 Accession				
55	TRP			
56	TRP II			
57	TRP III			
58	TRP IIII			
59	TRP V			
60	TRP VI			
61	TRP VII			
62	TRP VIII			I
63	TRP VIIII			II
64	TRP X	I a		III L-III
65		I b	IV	IV L-IV
66		I c		V L-V
67		2	VI	VI L-VI
68		3	last issue	

Moreover this sort of juxtaposition of issues suggests that there may at times have been a systematic cyclical pattern of production at the mint of Rome, in which officinae produced first aurei, then denarii and finally sestertii and/or other *aes* denominations in say A.D. 62, 63, 67 and 68. In fact, this may well reflect normal Julio-Claudian mint practice more accurately than the exceptional arrangements evolved for A.D. 64 to 66, to meet the exceptional circumstances of those years.

## THE CATALOGUE

## GENERAL NOTES

- \* An asterisk in front of a catalogue number indicates that the variety is illustrated in the accompanying plates. In each case, it is the example quoted first in the catalogue that is illustrated.

Where more than one example of a variety is illustrated, the coins in the plate for that catalogue number are shown in the order in which they are cited in the catalog entry and text discussion.

- + A frequency mark (+) after an entry for an aureus or denarius indicates that the variety is regularly represented in hoards. A frequency mark (+) after an entry for a sestertius, dupondius, As semis or quadrans indicates that the variety has been noted from three distinct obverse and reverse dies.

Die links between examples of *aes* denominations cited in the catalogue are shown in the following way:

BM (P) The second example, P, is struck from the same obverse die as the preceding coin—BM.

BM P The second example, P, is struck from the same reverse die as the preceding coin—BM.

BM (P) The second example, P, is struck from the same obverse and reverse dies as the preceding coin—BM.

BM P The second example, P, is struck from different obverse and reverse dies.

The catalogue is intended to be a catalogue of types and varieties, and not a catalogue of dies. While examples are quoted wherever possible from three distinct obverse and reverse dies, this is merely to establish the substantive varieties in each issue. Minor die varieties are therefore grouped together as a single entry in the catalogue, which does not, for example, distinguish the different number of ships on different Ostia reverse dies, or the different composition of the pile of arms on the Roma reverse dies.

The dates given in the catalogue to successive issues are those suggested in Chapters 9 and 10.

## OBVERSE DETAILS

The principal forms of obverse legend on the *aes* are:

- A. NERO *CLAVD(IVS)* CAESAR AVG *GER(M)* PM TRP  
*IMP PP*
- B. IMP NERO *CLAVD(IVS)* CAESAR AVG *GER(M)* PM  
TRP PP
- C. IMP NERO CAESAR AVG *P(ONTIF)* *M(AX)* *TR(IB)*  
*P(OT)* PP
- D. NERO *CLAVD(IVS)* CAESAR AVG *GER(MANICVS)*

The variable elements in each of these forms are italicized. Entries in the catalogue for coins with these legends quote the appropriate reference letter followed by specification of these variable elements. The catalogue cites in full all other obverse legends.

Variations in the representation of the emperor's head, as bare, laureate or radiate are noted under the heading for each issue. Where more than one form is employed during an issue, the relevant form is additionally noted at each catalogue entry. Other attributes such as the aegis or globe are treated in a similar way. On sestertii at Rome, most right facing heads in issues II to IV prove on close inspection to have traces of an aegis, although it is sometimes indistinct, especially on worn coins. But in issues V and VI there seem to be several right facing sestertius portraits that genuinely omit the aegis. At Lugdunum there is invariably a globe in front of the emperor's head on all denominations, although this is sometimes omitted from descriptions.

REVERSE TYPES  
(Foldout Section)

Throughout the catalogue, the reverse type for each entry is indicated by a simple description with a reference number in brackets that refers to the fuller description of the type that is given in this foldout section. Variable features within each reverse type, such as the absence or presence of SC and marks of value, are noted under the heading for each issue, or against each entry where more than one form is employed in an issue. Of the reverse types listed in the foldout, types 1 to 18 are those of the gold and silver, and types 21 to 52 are those of the *aes* denominations.

*Gold and Silver Reverse Types*

- (1) *Quadriga*  
 EX SC in exergue. Quadriga drawn r. by four horses.
- (2) *Wreath*  
 EX SC within oak wreath. Legends:  
 NERONI CLAVD DIVI F CAES AVG GERM IMP TRP  
 PONTIF MAX TRP II PP (PLATE I, 4)  
 PONTIF MAX TRP III PP  
 PONTIF MAX TRP III PP  
 PONTIF MAX TRP V PP  
 PONTIF MAX TRP VI COS IIII PP  
 PONTIF MAX TRP VII COS IIII PP
- (3) *Chariot*  
 AGRIPP AVG DIVI CLAVD NERONIS CAES MATER  
 In field, EX SC Divus Augustus and Divus Claudius  
 seated l. on chariot drawn l. by four elephants  
 (PLATE I, 3)
- (4) *Ceres*  
 EX SC in field. Ceres veiled standing l., r. holding  
 two corn ears and poppy, l. a long torch. Legends:  
 PONTIF MAX TRP VII COS IIII PP (PLATE I, 11)  
 PONTIF MAX TRP VIII COS IIII PP  
 PONTIF MAX TRP VIII COS IIII PP
- (5) *Virtus*  
 EX SC in field. Virtus, helmeted, standing l. with r.  
 foot on helmet, r. holding parazonium, l. a long  
 spear. Legends:  
 PONTIF MAX TRP VII COS IIII PP (PLATE I, 12)  
 PONTIF MAX TRP VIII COS IIII PP  
 PONTIF MAX TRP VIII COS IIII PP  
 PONTIF MAX TRP X COS IIII PP
- (6) *Roma*  
 EX SC in field. Roma, helmeted, standing r. with l.  
 foot on helmet, l. holding round shield which rests  
 on l. knee, r. inscribing it. Legends:  
 PONTIF MAX TRP VII COS IIII PP (PLATE I, 13)  
 PONTIF MAX TRP VIII COS IIII PP  
 PONTIF MAX TRP VIII COS IIII PP  
 PONTIF MAX TRP X COS IIII PP
- (7) *Victory*  
 VICT AVG Victory standing l., r. holding round  
 shield.
- (8) *Augustus Germanicus*  
 AVGVSTVS GERMANICVS Nero radiate and togate  
 standing facing, r. holding branch, l. victory on globe  
 (PLATE I, 22).



*Gold and Silver Reverse Types*

- (9) *Augustus Augusta*  
 AVGVSTVS AVGVSTA To l., Nero radiate and togate standing l., r. holding patera, l. a long sceptre; to r., Empress veiled standing l., r. holding patera, l. a cornucopiae (PLATE I, 23).
- (10) *Concordia Augusta*  
 CONCORDIA AVGVSTA Concordia seated l. on low stool, r. holding patera, l. a cornucopiae (PLATE I, 24).
- ⚔ (11) *Jupiter Custos*  
 IVPITER CVSTOS Jupiter with cloak round lower limbs seated l. on throne, r. holding thunderbolt, l. a long sceptre (PLATE I, 25).
- (12) *Janus temple*  
 IANVM CLVSIT PACE PR TERRA MARIQ PARTA Closed door of the temple of Janus (PLATE I, 26).
- (13) *Seated Roma (ex.)*  
 ROMA in exergue. Roma helmeted seated l. on cuirass, with r. foot back resting on helmet; r. holding victory, l. resting on parazonium (PLATE II, 27).
- (14) *Salus (ex.)*  
 SALVS in exergue. Salus seated l. on throne, r. holding patera, l. resting on side (PLATE II, 28).
- (15) *Vesta*  
 VESTA Front view of temple of Vesta. In center, figure of Vesta seated, r. holding patera, l. a long sceptre (PLATE II, 29).
- (16) *Seated Roma (fd.)*  
 ROMA across field. Otherwise as (13).
- (17) *Salus (fd.)*  
 SALVS across field. Otherwise as (14) (PLATE II, 68).
- (18) *Eagle and Standards*  
 Legionary eagle between two standards (PLATE II, 69).

(13) *Seated Roma Nero*  
*ROMA* in exergue. Roma helmeted seated l. on curvilinear  
 base. Behind her, standing on helmet, *Liberalitas* (PLATE IV, 52)

(21) *Adlocutio*

**ADLOCVT COH** in exergue. To r., low platform, from which Nero, standing l., accompanied by the praetorian prefect, addresses three soldiers standing in single file r., the front two carrying standards. In background, a domed building.

**ROME:** Sest. Issue II, without **SC** (PLATE II, 76)  
 Issue III, **SC**

**LUGD:** Sest. Issues L-III-VI, **SC** (PLATE XII, 405)

(22) *Annona*

**ANNONA AVGVSTI CERES** To r., Ceres seated l., l. holding torch, r. corn ears: facing her, Annona standing r., dressed in tunic and outer garment that falls below her waist, l. holding cornucopiae; between them, garlanded altar on which stands modius; in background, prow of corn ship r.

**ROME:** Sest. Issue II, without **SC** (PLATE II, 71)  
 Issue III, **SC**

**LUGD:** Sest. Issues L-III-VI, **SC** (PLATE XIII, 406)

(23) *Congiarium l.*

On l., high platform on which Nero seated r.; in front, an attendant seated r. at top of ladder distributing largess to a citizen who stands l. with one foot on rungs: behind the citizen, little boy standing l.;

*Gold and Silver Reverse Types*

in background on l., figure of Minerva, r. holding owl and l. spear; on r., figure of Liberalitas standing l. on lower pedestal, r. holding tessera.

**ROME:**

Sest. Issue II, without **SC**, **CONG II DAT POP R**  
**CONG II DAT POP**

Issue III, **SC**,  
**CONG II DAT POP**  
 (PLATE III, 106)  
**CONG I DAT POP**  
 (PLATE III, 106(1))

**LUGD:**

Sest. Issues L-IV A-VI, **SC**, **CONG I DAT POP**  
 (PLATE XIII, 432)

(24) *Congiarium r.*

On r., low platform on which Nero seated l.; behind, praefectus annonae standing facing; in front, an attendant standing l. handing tessera to citizen standing r.; in background, statue of Minerva standing l., r. holding owl, l. spear; behind to l., low building with flat roof.

**ROME:**

Sest. Issue II, without **SC**, **CONG II DAT POP**  
 Issue III, **SC**,  
**CONG II DAT POP**  
 (PLATE III, 88)

**LUGD:**

Sest. Issue L-IV, **SC**, **CONG II DAT POP**

(25) *Decursio r.*

**DECVRIO** in exergue. Nero cuirassed and with short tunic, r. holding spear, riding on horse prancing r.; behind him soldier on horseback r., carrying vexillum at the slope over r. shoulder.

ROME: Sest. Issue II, without SC

Issue III, SC (PLATE IV, 108)  
 LUGD: Sest. Issues L-IVA-VI, SC (PLATE XIV, 474)

(26) *Decursio l.*

**DECVRIO** in exergue. As (25), but Nero and attendant riding l.

ROME: Sest. Issue L-III, SC (PLATE IV, 109)

(27) *Decursio Vex.*

**DECVRIO** in exergue. Nero cuirassed and with short tunic, r. holding spear, riding on horse prancing r.; two attendants on foot in front and behind, the one in front carrying a vexillum.

ROME:

Sest. Issue II, without SC (PLATES II, 74, III, 78)  
 Issue III, SC

(28) *Janus TERRA door r.*

**PACE PR TERRA MARIQ PARTA IANVM CLVSIT, SC**  
 l. and r. in field. View of temple of Janus "closed door right," showing the front, a closed door with wreath hung across the top, and left-hand side with latticed window.

*Aes Reverse Types*

ROME: Sest. Issues IV-V

Issue VI (PLATE V, 165)

Dup. Issue IV

As. Issue IV (PLATE VIII, 218)

Issue IV (PLATE XI, 283)

LUGD: Sest. Issues L-IVB-VI (PLATE XIII, 419)

As. Issues L-IVA-V (PLATE XIX, 563)

(29) *Janus TERRA door l.*

**PACE PR TERRA MARIQ PARTA IANVM CLVSIT, SC**  
 l. and r. in field. View of temple of Janus "closed door left," showing the front, a closed door with wreath hung across top, and right-hand side with latticed window.

ROME: Sest. Issues IV-V

Issue VI

Dup. Issue L-IV (PLATE V, 171)

As. Issue L-IV

(30) *Ostia*

Bird's eye view of harbor at Ostia. At the top, pharos surmounted by statue of Neptune; below, reclining figure of Tiber l., l. holding dolphin, and r. rudder; on r., crescent-shaped row of breakwaters; on l., crescent-shaped mole with porticoes; in the harbor, a varying number of ships.

ROME: Sest. Issue III **AVGVSTI POR OST SC**

(PLATE III, 105)

**AVGVSTI POR OST SC**

LUGD: Sest. Issues L-IV-VI **PORT AVG SC**  
 (PLATE XIII, 420)

*Aes Reverse Types*

- (31) *Roma, vict. and paraz.*  
 ROMA in exergue, SC l. and r. in field. Roma seated l. on cuirass, r. holding victory and resting l. hand on parazonium; behind the cuirass a pile of arms, different on different specimens.  
 ROME: Sest. Issues IV-V (PLATE IV, 160)  
 Dup. Issue IV (PLATE VIII, 220)  
 LUGD: Sest. Issues L-IVB-VI (PLATE XIII, 428)
- (31a) *Roma, vict. and shield l.*  
 ROMA in exergue, SC l. and r. in field. As (31) but resting l. hand on shield.  
 ROME: Sest. Issue IV  
 Dup. Issue IVA
- (32) *Roma vict. and spear.*  
 ROMA in exergue, SC l. and r. in field. Roma seated l. on cuirass, r. holding victory, l. spear.  
 ROME: Sest. Issues IV-V (PLATES IV, 155, V, 172)  
 Dup. Issue IV-V
- (32a) *Roma wreath and spear*  
 As (32), but Roma holding wreath instead of victory.  
 ROME: Dup. Issue VI
- (33) *Roma shield l.*  
 ROMA in exergue, SC l. and r. in field. Roma seated l. on cuirass, r. holding spear, resting l. arm on shield.  
 ROME: Sest. Issue VI (PLATE V, 168)  
 Dup. Issue VI (PLATE IX, 240)

- (34) *Roma shield r.*  
 ROMA in exergue, SC l. and r. in field. Roma seated r. on cuirass, l. holding spear, resting r. arm on shield.  
 ROME: Sest. Issue VI (PLATE V, 169)  
 Dup. Issue VI
- (35) *Arch*  
 SC l. and r. in field. Triumphal arch, wreath hung across front and l. side; above, the Emperor in facing quadriga escorted by Victory on r. and Peace on l.; on extreme r. and l., two small figures of soldiers; on l., a statue of Mars in niche.  
 ROME: Sest. Issue III (PLATE III, 101)  
 LUGD: Sest. Issues L-IVA-VI (PLATE XIV, 452)
- (36) *Macellum*  
 Front view of the Macellum Magnum.  
 ROME: Dup. Issue II no legend, without SC (PLATE VI, 180)  
 Issue II MAC AVG, SC and II (PLATE VIII, 207)  
 LUGD: Dup. Issues L-III-IVA MAC AVG, SC (PLATE XIV, 493)

(37) *Securitas*

**SECVRTAS AVGVSTI** Securitas seated r. on throne, l. holding sceptre and resting r. elbow against throne. In front, garlanded and lighted altar against which leans lighted torch resting on bucranium.

ROME: Dup. Issue II, without SC (PLATE VI, 183)  
 Issue III, SC and  $\bar{\Pi}$  (PLATE VII, 198)

LUGD: Dup. Issues L-III-IVA, SC and  $\bar{\Pi}$

(PLATE XV, 494)  
 Issues L-IVB-V, SC

(PLATE XVII, 525)  
 Issues L-VI, SC in exergue

(PLATE XVII, 535)

⌘ (38) *Victoria l.*

**VICTORIA AVGVSTI** Victoria draped, flying l., with her r. leg well forward and clear of her drapery, r. holding wreath and l. palm.

ROME: Dup. Issue II, without SC (PLATE VII, 185)

Issue III, SC and  $\bar{\Pi}$  (PLATE VII, 205)  
 LUGD: Dup. Issue L-III, SC and  $\bar{\Pi}$

(PLATE XV, 496)

(39) *Victoria l. wk.*

**VICTORIA AVGVSTI** Victoria walking l., r. holding wreath, l. a palm, with r. leg shrouded in folds of her drapery. Beneath, a ground line.

LUGD: Dup. Issues L-III-IVA, SC and  $\bar{\Pi}$

(PLATE XV, 495)  
 Issues L-IVB-VI, SC

(PLATE XVII, 518)

*Aes Reverse Types*

(40) *Victoria r.*

**VICTORIA AVGVSTI** Victoria draped, flying r., with r. leg well forward and clear of drapery, r. holding wreath and l. palm.

ROME: Dup. Issue III, SC and  $\bar{\Pi}$  (PLATE VII, 200)

(41) *Janus VBIQ door r.*

**PACE PR VBIQ PARTA IANVM CLVSIT**, SC l. and r. View of the temple of Janus "closed door right," showing the front, a closed door with wreath hung across top, and left-hand side with latticed window.

ROME: Dup. Issues IV-V  
 Issue VI (PLATE VIII, 235)

C. As. Issues L-IV-V

(PLATE XI, 288)

(42) *Janus VBIQ door l.*

**PACE PR VBIQ PARTA IANVM CLVSIT**, SC l. and r. View of the temple of Janus "closed door left," showing the front, a closed door with wreath hung across top, and right-hand side with latticed window.

ROME: Dup. Issues IV-V  
 Issue VI

(PLATE IX, 238)

C. As. Issues IV-V

(PLATE XI, 300)

(43) *Roma wreath and parazonium*

**ROMA** in exergue, SC l. and r. Roma seated l. on cuirass, r. holding wreath and resting l. hand on parazonium.

ROME: Dup. Issues IV-V (PLATE VIII, 225)

(44) *Apollo*

Nero laureate advancing r., in flowing robes of  
 Apollo citharoedus, l. holding lyre, r. playing it.  
 Various legends:

- (a) PONTIF MAX TR POTEST IMP PP
- (b) PONTIF MAX TR POT IMP PP
- (c) PONTIF MAX TR P IMP PP

ROME: C. As. Issue I, anepigraphic, without SC  
 (PLATE IX, 242)  
 Legend (c), without SC  
 (PLATE IX, 246)

Or. As. Issue II, Legend (b), without SC  
 (PLATE IX, 257)  
 Issue III, Legends (a), (b) and (c),  
 SC and T  
 (PLATE X, 262), (b), (c)

LUGD: Or. As. Issues L-III, Legend, (b) SC and T  
 (PLATE XVII, 539)

C. As. Transitional group, Legend (b),  
 SC and T  
 (PLATE XVIII, 542)  
 Issues L-IV A-IV B, Legend (b), SC  
 (PLATE XVIII, 547)

(45) *Ara*

ARA PACIS in exergue, SC l. and r. The wall of an  
 altar enclosure, behind which are horns l. and r. The

*Aes Reverse Types*

wall has four decorated panels and a narrow door  
 in the center.

LUGD: C. As. Issues L-II-IV (PLATE XVIII, 561)

(46) *Genius*

GENIO AVGVSTI Genius standing l., l. holding cor-  
 nucopiae, r. holding patera in act of sacrificing over  
 a lighted altar l.

ROME: C. As. Issue I, without SC  
 (PLATE IX, 255)  
 Or. As. Issue II, without SC  
 (PLATE X, 261)

Issue III, SC and T (PLATE X, 267)

LUGD: Or. As. Issues L-III, SC and T  
 (PLATE XVIII, 538)

C. As. Issues L-IV A-V, SC  
 (PLATE XVIII, 544)

(47) *Victory*

SC l. and r. Victory draped flying l., holding in both  
 hands a shield inscribed SPQR\*

ROME: As. Issues IV-VI (PLATE XI, 290)

LUGD: As. Issues L-IV-V (PLATE XIX, 574)

\* One As in the ANS (*Cat.* 475) has the letters SCPR on  
 the shield.

H

*Aes Reverse Types*

(48) *Roma*

Roma seated l. on cuirass, r. holding wreath and resting l. hand on parazonium as in (31), but with legends:

- (a) MAX TRIB POT PP
- (b) PONTIF MAX TR POT IMP PP
- (c) PONTIF MAX TR P IMP PP
- (d) PONTIF MAX TR POT PP
- (e) PONTIF MAX TR P PP
- (f) PON MAX TRP IMP PP
- (g) PON MA TRP IMP PP
- (h) P M TRP PP
- (i) TRIB POT PP
- (k) TR PON PP
- (l) TR POT PP

ROME: C. Sem. Issue IA, without SC,

anepigraphic

Issue IB, without SC

(PLATE XII, 304)

Or. Sem. Issue III, SC and S

(PLATE XII, 331)

LUGD: C. Sem. Issue L-IVB, SC

(PLATE XX, 608)

Issue L-V, SC (PLATE XX, 626)

(49) *Table*

A gaming table ornamented by two griffins. On it, urn l. and wreath r. Against its central leg rests a round shield. Legends:

- (a) CERTAMEN QVINQ ROM CON
- (b) CERTAMEN QVINQ ROM CO
- (c) CERTAMEN QVINQ ROM CO
- (d) CERTA QVINQ ROM CON
- (e) CERTA QVINQ ROM CO
- (f) CERT QVINQ ROM CON
- (g) CERT QVINQ ROM CO
- (h) CER QVINQ ROMAE CONS
- (j) CER QVINQ ROMAE CON
- (k) CER QVINQ ROM CON
- (l) CER QVINQ ROM CO
- (m) CER QVINQ RMA CO

ROME: C. Sem. Issue I, without SC

(PLATE XII, 307)

Or. Sem. Issue III, SC, S

(PLATE XII, 327)

LUGD: Or. Sem. Issues L-III, SC

(PLATE XX, 604)

C. Sem. Issues L-IV A-V, SC

(PLATE XX, 609)

*Aes Reverse Types*

(50) *Branch*

A laurel branch.

ROME: C. Q. Issue I, without SC (PLATE XII, 337)  
Or. Q. Issue II, without SC (PLATE XII, 338)  
Or. Q. Issue III, SC, sometimes . (PLATE XII, 349)  
C. Q. Issue IV, SC (PLATE XII, 360)

H

(51) *Column*

A helmet placed r. on column; to r. a shield resting against column; behind, a spear pointing upward to r.

ROME: C. and Or. Q. sometimes as obverse, sometimes as reverse type. (PLATE XII, 362)

(52) *Victory v. Pallas*

Victory advancing right, holding small figure of Pallas in r., and palm l., SC l. and r. in field.

ROME: Sest. Last Issue.





Rome: Aurei

No.	Obverse	Reverse	Coll.	RIC	BMC
<b>Mint of Rome</b>					
<b>PRE-REFORM AUREI</b>					
1.	DIVVS CLAVDIVS A.D. 54/55				
	DIVVS CLAVDIVS AVGVSTVS Head of Claudius, laur. l.	(1) Quadriga	BM, P, V	I	4f.
	TR P A.D. Dec. 54				
*2.	AGRIPP AVG DIVI CLAVD NERONIS CAES MATER Confronted busts of Nero r., Agrippina l.	(2) Wreath NERONI CLAVD DIVI F CAES AVG GERM IMP TRP	BM, P, V	9	I f.
*3.	TR P COS A.D. 55				
	NERO CLAVD DIVI F CAES AVG GERM IMP TRP COS Jugate busts of Nero and Agrippina r.	(3) Chariot	BM, P, V	10	7

No.	Obverse	Reverse		Coll.	RIC	BMC
*4.	TRP II-TRP X A.D. 55/56-63/64 Head bare r. NERO CAESAR AVG IMP	(2) Wreath TRP II	+	BM, P, V	18	9f.
5.		(2) Wreath TRP III	+	BM, P, V	19	12f.
6.		(2) Wreath TRP III COS II		Maz, cast in BM	20	
7.		(2) Wreath TRP IIII	+	BM, P, V	21	15
8.		(2) Wreath TRP V	+	BM, P, V	22	17ff.
9.		(2) Wreath TRP VI	+	BM, P, V	24	21f.
*10.		(2) Wreath TRP VII	+	BM, P, ANS	25	23
*11.		(4) Ceres TRP VII	+	BM, P, V	26	25
*12.		(5) Virtus TRP VII	+	BM, P, V	27	27
*13.		(6) Roma TRP VII	+	BM, P, V	28	29
*14.		(4) Ceres TRP VIII		BM, V, PW II	29	31
15.		(5) Virtus TRP VIII	+	BM, P, V	30	33f.
16.		(6) Roma TRP VIII	+	BM, V, C	31	36
17.		(4) Ceres TRP VIII	+	BM	32	39
18.		(5) Virtus TRP VIII	+	BM, P, V	33	40f.
*19.		(6) Roma TRP VIII	+	BM, V, H	34	43
*20.		(5) Virtus TRP X	+	BM, P, V	35	45f.
21.		(6) Roma TRP X	+	BM, P, V	36	49ff.

*Rome: Aurei*

No.	Obverse	Reverse	Coll.	RIC	BMC
POST-REFORM AUREI					
*22.	<b>Issue I</b> Without IMP A.D. 64/66 Head laur r. NERO CAESAR NERO CAESAR AVGVSTVS	(8) Augustus Germanicus		42	56ff.
*23.		(9) Augustus Augusta		41	52f.
*24.		(10) Concordia Augusta		43	61, 62
*25.		(11) Jupiter Custos		45	67ff.
*26.		(12) Janus Temple		44	64ff.
*27.	<b>Issue II</b> IMP as praenomen A.D. 67 Head laur. r. NERO CAESAR AVGVSTVS	(13) Seated Roma (ex.)		50	81f.
*28.		(14) Salus (ex.)		52	87ff.
*29.		(15) Vesta		58	101ff.
*30.		(11) Jupiter Custos		46	77f.
*31.		(14) Salus (ex.)		53	94f.

No.	Obverse	Reverse	Rome: Aurei		
			Coll.	RIC	BMC
	<b>Issue IIIa</b> IMP as praenomen PP A.D. 68 Head laur. r.				
32.	NERO CAESAR AVG PP	(11) Jupiter Custos	BM, Ox, Mor	47	79
33.		(14) Salus (ex.)	P, V, Trau	54	
	PRE-REFORM GOLD QUINARIUS				
	TRP II Head bare r. A.D. 55/56				
34.	NERO CL DIVI F CAES AVG PM TRP II	(7) Victory	BM	17	11



Rome: Denarii

No.	Obverse	Reverse	Coll.	RIC	BMC
	PRE-REFORM DENARII				
35.	DIVVS CLAVDIVS A.D. 54/55 Head of Claudius laur. l. DIVVS CLAVDIVS AVGVSTVS TRP	(1) Quadriga	BM, V, Ox	I	6
36.	A.D. Dec. 54 AGRIPP AVG DIVI CLAVD NERONIS CAES MATER Confronted busts of Nero r., Agrippina l. TRP COS	(2) Wreath as 2	BM, V, Ox	9	3
37.	A.D. 55 NERO CLAVD DIVI F CAES AVG GERM IMP TRP COS Jugate busts of Nero and Agrippina r. TRP II-TRP X	(3) Chariot	BM, V, Ox	10	8
38.	A.D. 55/56 to 63/64 NERO CAESAR AVG IMP Head bare r.	(2) Wreath TRP II	P, P	18	
39.		(2) Wreath TRP III	BM, P, ANS	19	14
					161

*Rome: Denarii*

No.	Obverse	Reverse	Coll.	RIC	BMC
40.		(2) Wreath TRP IIII	BM, P, Ox	21	16
41.		(2) Wreath TRP V	BM, V, Ox	22	20
42.		(2) Wreath TRP VI	H	24	
43.		(2) Wreath TRP VII	BM, P, Ox	25	24
44.		(4) Ceres TRP VII	BM, P, ANS	26	26
45.		(5) Virtus TRP VII	P, V	27	
46.		(6) Roma TRP VII	BM, P, V	28	30
47.		(4) Ceres TRP VIII	BM, P	29	32
48.		(5) Virtus TRP VIII	BM, P, Ox	30	35
49.		(6) Roma TRP VIII	BM, P, ANS	31	37f.
50.		(5) Virtus TRP VIII	BM	33	42
51.		(6) Roma TRP VIII	BM	34	44
52.		(5) Virtus TRP X	BM, P, V		47f.
53.		(6) Roma TRP X	P		
POST-REFORM DENARII					
Issue I Without IMP					
A.D. 64/66 Head laur. r.					
NERO CAESAR					
NERO CAESAR AVGVSTVS					
54.		(8) Augustus Germanicus	+	42	60
55.		(9) Augustus Augusta	+	41	54f.
56.		(10) Concordia Augusta		43	63

*Rome: Denarii*

No.	Obverse	Reverse	Coll.	RIC	BMC
57.	<b>Issue II</b> IMP as praenomen A.D. 66/67 Head laur. r.	(11) Jupiter Custos	+ BM, P, V	45	74ff.
58.		(12) Janus Temple	+ Mun		
59.		(13) Seated Roma (ex.)	+ BM, P, V	50	83ff.
60.		(14) Salus (ex.)	+ BM, P, V	52	90ff.
61.		(15) Vesta	+ BM, P, V	58	104ff.
62.	IMP NERO CAESAR AVGVSTVS	(11) Jupiter Custos	+ BM, P, V	46	
63.		(13) Seated Roma (ex.)	+ Mil		
64.		(14) Salus (ex.)	+ BM, P, V	53	96f.
*65.	<b>Issue IIIa</b> IMP as praenomen PP A.D. 67/68 Head laur. r.	(11) Jupiter Custos (14) Salus (ex.)	+ BM, P, V + BM, P, V	47 54	80 98
*66.					
*67.	<b>Issue IIIb</b> IMP as praenomen. New rev. types A.D. 68 Type and Leg. as 3a	(16) Seated Roma (fd.)	BM, P, M	51	86
*68.		(17) Salus (fd.)	BM, P, V	56	99f.
*69.		(18) Eagle and standards	BM, P, V	60	107f.



		Rome: Sestertii			
No.	Obverse	Reverse	Coll.	RIC	BMC
	SESTERTII				
	<b>Issue I</b>				
	No sestertii				
	<b>Issue II</b> Without SC. IMP as cognomen				
	A.D. 63 Head laur. r. aegis or laur. l.				
	A. CLAUDIVS ... GERM r.	(21) Adlocutio			
70.		(22) Annona	P, F	70	
*71.		(23) Congiarium l.	RT, P, RV	86	
72.		(24) Congiarium r.	F, G (S)		
73.		(27) Decursio Vex.	Ox, Sim		
*74.		(25) Decursio r.	Mil, V, P	146	
75.		(21) Adlocutio	RT	138	
*76.	A. CLAUDIVS ... GERM l.	(22) Annona	V (BM), S	71	126
77.		(27) Decursio Vex	RV, Ox, C	87	
*78.		(27) Decursio Vex	P, G, BM	145	155
79.	A. CLAUD ... GERM r.	(25) Decursio r.	RV, BM	144	154
80.		(21) Adlocutio	BM (M)		
81.	A. CLAUD ... GERM r.	(23) Congiarium l. <sup>1</sup>	BM (Sig)		
82.		(27) Decursio Vex	V, P (RV)	118	
83.	A. CLAUD ... GER r.		Ox		

<sup>1</sup> Reads CONG II DAT POP R

Rome: Sestertii

No.	Obverse	Reverse	Coll.	RIC	BMC
<b>Issue III SC. IMP as cognomen</b>					
A.D. 64 Head laur. r. aegis or laur. l.					
84.	A. CLAVDIVS ... GERM r.	(21) Adlocutio	BM, G, V	66	124f.
85.		(22) Annona	P, RT, Ox	78	
86.		(30) Ostia	X, X		
87.		(23) Congiarium l.	BM, <sup>1</sup> PW I <sup>2</sup>	117	138
*88.		(24) Congiarium r.	V, BM, Ox	123	140
89.		(25) Decursio r.	BM, ANS, Vie	133	146
90.		(35) Arch	RV, V, Cam	154	
91.	A. CLAVDIVS ... GERM l.	(21) Adlocutio	P	67	
92.		(22) Annona	RT, MRA	77a	
93.		(24) Congiarium r.	Mil, RT (P)	124	141
94.		(25) Decursio r.	BM (Ox), Ox	133	147
95.		(35) Arch	BM (S), Vie	155	190
96.	A. CLAVD ... GERM r.	(21) Adlocutio	Mil, M	64	
97.		(30) Ostia	Lau	99	
98.		(23) Congiarium l.	P <sup>1</sup> (ANS) <sup>3</sup>	111	
98a.		(23) Congiarium l.	Bah <sup>4</sup>	115	

<sup>1</sup> Reads CONG II DAT POP SC

<sup>2</sup> Reads CONG I DAT POP SC

<sup>3</sup> Reads CONG I DAT POP SC RIC 112, BMC 136

<sup>4</sup> Reads CONG II DAT POP SC RIC 116, BMC 137

Rome: Sestertii

No.	Obverse	Reverse		Coll.	RIC	BMC
99.		(24) Congiarium r.		RT, V		
100.		(25) Decursio r.	+	Ox, Ly, Hir 26	130	
*101.		(35) Arch	+	C, N, Cam	150	
102.	A. CLAVD ... GERM l.	(21) Adlocutio		P	65	
102A.		(35) Arch		N		
103.	A. CLAVDIVS ... GER r.	(21) Adlocutio		Hir 11, Bah		
104.		(22) Annona	+	BM, P, S	76	130
*105.		(30) Ostia	+	V, RT, Ox	88	134
*106.		(23) Congiarium l.	+	N <sup>a</sup> V <sup>1</sup> P <sup>1</sup>		
107.		(24) Congiarium r.		BM, P, M	122	139
*108.		(25) Decursio r.	+	P, BM, ANS	131	143f.
*109.		(26) Decursio l.	+	P, BM, Ox	141	148ff.
110.		(27) Decursio Vex		N		
111.		(35) Arch	+	BM, RV, M	152	185ff.
112.	A. CLAVDIVS ... GER l.	(22) Annona		P, X (Hall)	75	
113.		(30) Ostia	+	BM, P, N	96	135
114.		(25) Decursio r.	+	RT, H, Bem	132	145
115.		(26) Decursio l.	+	BM, Vie, Vau	140	152f.
116.		(27) Decursio Vex		G (Die)		
117.		(35) Arch	+	BM, P, N	153	188f.
118.	A. CLAVD ... GER r.	(21) Adlocutio		BM (P), N	61	122f.
119.		(22) Annona	+	BM, Ox, Al	74	127f.

Rome: Sestertii					
No.	Obverse	Reverse	Coll.	RIC	BMC
120.	A. CLAVD ... GER I.	(30) Ostia	BM, P, N	90	131f.
121.		(23) Congiarium l. <sup>1</sup>	G, N (D)	121	
122.		(24) Congiarium r.	Ox, Sa	129	
123.		(25) Decursio r.	RV, Ox, Cam		
124.		(26) Decursio l.	H, N, B		
125.		(27) Decursio Vex	Ox, Lob		
126.		(35) Arch	BM, N, Ox	148	183
127.		(21) Adlocutio	Bem, Bas I		
128.		(22) Annona	BM, Con, RV	74	129
129.		(30) Ostia	P, PW I (Hir 12)	92	
130.		(23) Congiarium l. <sup>1</sup>	Pr		
131.		(25) Decursio r.	BM, N, RC	127	142
132.		(26) Decursio l.	ANS, P (PW II)	139	
133.		(27) Decursio Vex	P	142	
134.		(35) Arch	BM, O, Mil	147	184

<sup>1</sup> Reads CONG T DAT POP

No.	Obverse	Reverse	Coll.	RIC	BMC
	<b>Issue IV SC. IMP as cognomen</b> Head laur. r. aegis or laur. l.				
	A.D. 65 Roma and Janus temple types.				
*135.	NERO CAESAR AVG IMP TR POT XIP PP cuir. r.	(31) Roma vict. and paraz.	Ox (Maz)	205	
*136.		(28) Janus TERRA door r.	N (BM) (RT)	170	111f.
137.	A. CLAUDIVS ... GER r.	(31) Roma vict. and paraz.	BM, P, RT	211	180
138.		(32) Roma vict. and spear	BM, RT (RV)	219	170
139.		(28) Janus TERRA door r.	P, H, Ox	179	161
140.		(29) Janus TERRA door l.	BM, P, RT	161	164f.
141.	A. CLAUDIVS ... GER l.	(31) Roma vict. and paraz.	P, Ox, RV	210	
142.		(32) Roma vict. and spear	Mil (M), Man		
143.		(28) Janus TERRA door r.	Ox, V, Hall	180	
144.		(29) Janus TERRA door l.	P, RT, Cam	160	
145.	A. CLAUD ... GER r.	(31) Roma vict. and paraz.	BM, P, RT	208	173ff.
146.		(32) Roma vict. and spear	Ox, BM, Tib		168f.
147.		(31a) Roma vict. and shield l.	RT, V	222	
148.		(28) Janus TERRA door r.	BM, Ox, N	172	156ff.
149.		(29) Janus TERRA door l.	Ox, S, Al		
150.	A. CLAUD ... GER l.	(31) Roma vict. and paraz.	P, RT, Ox	206	178f.
151.		(32) Roma vict. and spear	P, Ox	218	
152.		(31a) Roma vict. and shield l.	Syd	222	

*Rome: Sestertii*

No.	Obverse	Reverse	Coll.	RIC	BMC
I53. I54.		(28) Janus TERRA door r. (29) Janus TERRA door l.	P, RT, Ox RT (AC I6)	I71	I60
<b>Issue V IMP as praenomen</b> A.D. 66 Head laur. r. or laur. l.; right heads sometimes have aegis					
*I55. I56. I57. I58. I58A. I59. *I60.	B. CLAUDIVS ... GER r.	(32) Roma vict. and spear (28) Janus TERRA door r. (29) Janus TERRA door l. (32) Roma vict. and spear (31) Roma vict. and paraz. (29) Janus TERRA door l. (31) Roma vict. and paraz.	RT, AC I3 PW II P (RV) (PW I) T Man BM, Pri BM, RT, R, Tib	221 I66  I67 212	     I81f.
I61. I62. I63. I63A. I64. *I65. I66.	B. CLAVD ... GER l.	(32) Roma vict. and spear (28) Janus TERRA door r. (31) Roma vict. and paraz. (31a) Roma vict. and shield l. (32) Roma vict. and spear (28) Janus TERRA door r. (29) Janus TERRA door l.	BM, P, RT BM, P, N Cam, V, P VV BM, Mun, Sch P, RT, Cam BM	220 I82 212  220 I82	I71f. I62    I63

No.	Obverse	Reverse	Coll.	RIC	BMC
	<b>Issue VI IMP as praenomen. TRP XIII</b> A.D. 67 Head laur. r. or l.				
167.	B. CLAVD ... GERM r.	(32) Roma vict. and spear	Her, N, O	233	114ff.
*168.		(33) Roma shield l.	V, P, BM	238	
*169.		(34) Roma shield r.	C, Mun, Be	113	
170.		(28) Janus TERRA door r.	BM	167	
*171.		(29) Janus TERRA door l.	N, V, RT		
*172.	B. CLAVD ... GER l.	(32) Roma vict. and spear	C (S) (Her)		
173.		(33) Roma shield l.	Har, Mor		
174.		(34) Roma shield r.	BM	119	
174A.		(29) Janus TERRA door l.	P		
	<b>Last Issue IMP as praenomen. TRP XIV</b> A.D. 68 Bust draped l. crowned with bay				
175.	B. CLAVD ... GER ... XIV l.	(52) Victory and palm	Wal	333	
176.		(33) Roma shield l.	M		

*Rome: Dupondii*

No.	Obverse	Reverse	Coll.	RIC	BMC
DUPONDII					
<b>Issue I</b>					
No dupondii					
<b>Issue II</b> Without SC. No mark of value. IMP as cognomen					
A.D. 63 Head bare, laur., or rad., r. or l.					
*177.	A. CLAVDIVS ... GERM bare r.	(38) Victoria l.	Wal	300	
178.	A. CLAVDIVS ... GERM bare l.	(38) Victoria l.	S		
*179.	A. CLAVDIVS ... GERM laur. r.	(38) Victoria l.	Bl (O), O		
*180.	A. CLAVD ... GERM laur. r.	(39) Macellum	BM, P (Cam)	281	196
*181.	A. CLAVDIVS ... GERM rad. r.	(38) Victoria l.	Ox (N)		
182.	A. CLAVDIVS ... GERM ... IMPP rad. r.	(38) Victoria l.	S		
182A.	A. CLAVDIVS ... GER rad. r.	(37) Securitas	Cha		
*183.	A. CLAVD ... GERM rad. l.	(37) Securitas	V (C) (Ox)		
*184.	A. CLAVD ... GERM ... IMPP rad. r.	(36) Macellum	BM, C (ANS)	282	197
*185.	A. CLAVD ... GER rad. r.	(38) Victoria l.	BM (F) (Ox)	299	221
*186.		(36) Macellum	RT (P)		
*187.		(37) Securitas	Cam		
*188.		(38) Victoria l.	RT	298	



No.	Obverse	Reverse	Coll.	RIC	BMC
	<b>Issue III SC and mark of value Π. IMP as cognomen</b>				
	<b>A.D. 64 Head rad. r. or l.</b>				
189.	A. CLAVDIVS ... GERM r.	(36) Macellum	N		
190.		(37) Securitas	P, Sof	297	
191.		(38) Victoria l.	BM, V, Cam	311	220
192.	A. CLAVD ... GERM r.	(36) Macellum	T		
193.		(37) Securitas	P, H, ANS	294	
194.		(38) Victoria l.	Cuz (Maz) Her	309	
195.	A. CLAVD ... GERM l.	(37) Securitas	H (RT)	294	
196.		(38) Victoria l.	BM (P), Ox	309	219
197.	A. CLAVDIVS ... GER r.	(36) Macellum	BM (P) (RV)	279	195
*198.		(37) Securitas	P, V, RT	295	213
199.		(38) Victoria l.	P, Cam, Mun	310	
*200.		(40) Victoria r.	BM, P, V <sup>1</sup>		
201.	A. CLAVDIVS ... GER l.	(37) Securitas	P, H, Hel 1929	295	
202.		(36) Macellum	Man, M		
203.	A. CLAVD ... GER r.	(36) Macellum	BM, <sup>2</sup> P, H	278	191f.
204.		(37) Securitas	V, RV, Mil	292	
*205.		(38) Victoria l.	BM, RV, Cam	308	214ff.

<sup>1</sup> A dupondius of this type in the Almirall Coll. and another in Madrid with the same obv. but different rev. dies both have the unbarred mark of value II.

<sup>2</sup> Without mark of value. Cf. RIC 274

*Rome: Dupondii*

No.	Obverse	Reverse	Coll.	RIC	BMC
206.	A. CLAVD ... GER l.	(40) Victoria r.	BM, P, RT	312	222
*207.		(36) Macellum	BM (RV), H	278	193f.
208.		(38) Victoria l.	V, ANS	308	
209.		(40) Victoria r.	BM (Mor)	312	223
<b>Issue IVA SC, no mark of value, Sestertius types</b>					
A.D. 65 IMP as cognomen					
Head laur. r. or rad. r. or l.					
*210. <sup>1</sup>	A. CLAVD ... GER laur. r.	(28) Janus TERRA door r.	BM	174	199
*211. <sup>1</sup>		(31) Roma vict. and paraz.	BM	225 <sup>1</sup>	207 <sup>2</sup>
*212. <sup>1</sup>		(37) Securitas	BM (Ox)	289	212
213.	A. CLAVDIVS ... GER rad. r.	(28) Janus TERRA door r.	Cam	181	
214.		(29) Janus TERRA door l.	P	162	
215.	A. CLAVD ... GER rad. r.	(28) Janus TERRA door r.	BM, P, RV	177	198
216.		(31) Roma vict. and paraz.	P, RV, C	209	
217.		(31a) Roma vict. and shield l.	BM		
217A.		(32) Roma vict. and spear l.	BM		
*218.	A. CLAVD ... GER rad. l.	(28) Janus TERRA door r.	BM, RT, BI	177	200
219.		(29) Janus TERRA door l.	Her		
*220.		(31) Roma vict. and paraz.	BM, Ox, Mil	209	210

<sup>1</sup> These coins are illustrated on PLATE XXIII.

<sup>2</sup> RIC 225 (quoting the BM coin BMC 207) has been reworked. The wreath held by Roma seems to have been substituted for the original victory.

Rome: *Dupondii*

No.	Obverse	Reverse	Coll.	RIC	BMC
	<b>Issue IVB SC</b> , no mark of value. Distinctive depondius types A.D. 65 IMP as cognomen. Head rad. r. or l.				
221.	A. CLAUDIVS ... GER r.	(43) Roma wreath and paraz.	G	226	
222.		(42) Janus VBIQ door l.	Ox, M, BM	192	203
223.	A. CLAUDIVS ... GER l.	(43) Roma wreath and paraz.	P		
224.	A. CLAUD ... GER r.	(41) Janus VBIQ door r	BM, M, Mil	200	
*225.		(43) Roma wreath and paraz.	BM, P, RV	224	205f.
*226.	A. CLAUD ... GER l.	(41) Janus VBIQ door r.	BM (RT), Bah	200	201
227.		(43) Roma wreath and paraz.	BM, P, V	224	208
	<b>Issue V IMP</b> as praenomen, undated A.D. 66 Head rad. r. or l.				
228.	B. CLAUD ... GER rad. r.	(28) Janus TERRA door r.	Wi		
229.		(29) Janus TERRA door l.	ANS		
230.		(40) Victoria r. II	BM	314	224
231.		(41) Janus VBIQ door r.	P, Ox (V)	201	
232.		(42) Janus VBIQ door l.	P, ANS	193	
233.		(43) Roma wreath and paraz.	P, RT, F	227	
234.		(32) Roma vict. and spear	BM, M ( <i>Mun</i> )		
*235.	B. CLAUD ... GER rad. l.	(41) Janus VBIQ door r.	BM, V	201	202
236.		(42) Janus VBIQ door l.	BM, M, Y	193	204
*237.		(43) Roma wreath and paraz.	BM RC) H)	227	209

<i>Rome: Dupondii</i>					
No.	Obverse	Reverse	Coll.	RIC	BMC
	<b>Issue VI IMP as praenomen TRP XIII</b> A.D. 67 Head rad. or l.				
*238.	B. CLAVD ... GERM XIII r.	(42) Janus VBIQ door l.	G, V, V	197	
239.		(32a) Roma wreath and spear	ANS	228	
*240.		(33) Roma shield l.	BM, P, V	234	120f.
241.		(34) Roma shield r.	Mes		

No.	Obverse	Reverse	Coll.	RIC	BMC
<b>ASSES</b>					
	<b>Issue IA</b> Copper without SC. Head bare r. or l. A.D. 62 Anepigraphic Apollo				
*242.	A. CLAVDIVS ... GERM r.	(44) Apollo	P	375	
243.	A. CLAVD ... GERM r.	(44) Apollo	Wal, Sig, Im	374	
244.	A. CLAVD ... GERM l.	(44) Apollo	BM, Ox	374	238
245.	A. CLAVD ... GERM ... IMP r.	(44) Apollo	RT (G)		
	<b>Issue IB</b> Copper without SC. Head bare r. or l. A.D. 62 Reverse types of Apollo and Genius				
*246.	D. CLAVDIVS ... GERMANIC r.	(44) Apollo TRP	+ P, Ox, BM	351	235
247.	D. CLAVDIVS ... GERMANIC l.	(44) Apollo TRP	+ P, F, Ox	351	
248.	D. CLAVDIVS ... GERMAN r.	(44) Apollo TRP	Ox, R, Tib		
249.	D. CLAVDIVS ... GERMA r.	(44) Apollo TRP	+ C, Mz, Syd	350	
*250.	D. CLAVDIVS ... GERMA l.	(44) Apollo TRP	BM, P	236	
251.	A. CLAVDIVS ... GERM l.	(46) Genius	Maz		
252.	A. CLAVD ... GERM r.	(46) Genius	+ RT, Mz, Ox	337	
253.	A. CLAVD ... GERM ... IMP P r.	(46) Genius	M		
254.	A. CLAVD ... GER r.	(44) Apollo TRP	BM	353	234
*255.		(46) Genius	RT	336	
256.	A. CLAVD ... GER laur. r.	(46) Genius	Mer	335	

No.	Obverse		Reverse		Rome: Asses		
					Coll.	RIC	BMC
	<b>Issue II</b> Orichalcum without SC. No mark of value A.D. 63 Head laur. or rad. r.						
*257.	D. CLAVDIVS ... GERMANICVS laur. r.	(44) Apollo TR POT			C (Cam) V	356	
*258.		(46) Genius			V		
259.	D. CLAVDIVS ... GERMANICVS rad. r.	(44) Apollo TRPOT			M		
*260.	D. CLAVD ... GERMANIC rad. r.	(44) Apollo TRPOT			V (BM) (P)	257	
*261.	A. CLAVD ... GERM rad. r.	(46) Genius			V (BM), G		
	<b>Issue III</b> Orichalcum with SC and mark of value T A.D. 64 Head laur. or rad. r.						
*262.	D. CLAVDIVS ... GERMANIC laur. r.	(44) Apollo TR POTES			V (G) (RT) <sup>1</sup>	258	
263.		(44) Apollo TR POT			G, RC (Hir 34)		
264.		(44) Apollo TR P			H, (V)		
265.		(46) Genius			Ox (Mil)		
266.	A. CLAVDIVS ... GER laur. r.	(46) Genius			V		
*267.	A. CLAVD ... GERM laur. r.	(46) Genius			Cam (Mil) (P)		

<sup>1</sup> A further example in the BM from the same obv. and rev. dies is struck on a dupondius flan.

No.	Obverse	Reverse	Coll.	RIC	BMC
267A.	A. CLAVD ... GERM ... IMPP laur. r.	(46) Genius	Dr 1921		
268.	A. CLAVD ... GER ... IMP laur. r.	(46) Genius	P (RV) (C)		
269.	A. CLAVD ... GER laur. r.	(46) Genius	BM, G, Vog	344	252
270.	A. CLAVD ... GERM rad. r.	(44) Apollo TRPOT	Ox (V) (RV)		
271.		(46) Genius	Ox (P) (Mil)	346	253 <sup>1</sup>
*272.	D. CLAVDIVS ... GERMANIC rad. r.	(44) Apollo TRPOT	H (V) BM	373	256
273.	D. CLAVD ... GERMANICVS rad. r.	(44) Apollo TRP	V (B) <sup>1</sup>		
274.	D. CLAVD ... GERMANIC rad. r.	(44) Apollo TRP	Hah		
275.	D. CLAVD ... GERMANI rad. r.	(44) Apollo TRP	BM (P) (RC)	368	254
*276.	A. CLAVD ... GER rad. r.	(46) Genius	C, P, BM	345	251
<b>Issue IV A Copper. IMP as cognomen</b>					
Long obverse legend					
A.D. 65 Head bare r., or laur. r. or l.					
277.	A. CLAVD ... GER bare r.	(28) Janus TERRA door r.	Ox, F	174	
*278.	A. CLAVDIVS ... GER laur. r.	(47) Victory	BM, P	322	240

<sup>1</sup> No mark of value in the exergue.

No.	Obverse	Reverse	Coll.	RIC	BMC
278A.		(42) Janus VBIQ door l.	M		
279.	A. CLAVD ... GER laur. r.	(47) Victory	+	BM, May, B	
280.		(28) Janus TERRA door r.		N (RT)	
281.		(29) Janus TERRA door l.		Her	
282.	A. CLAVD ... GER laur. l.	(47) Victory		Ox	
<b>Issue IV B<sup>1</sup> Copper. IMP as cognomen</b> Short obverse, but long reverse legend A.D. 65      Head laur. r. or l.					
*283.	NERO CAESAR AVG GERM IMP r.	(28) Janus TERRA door r.	+	BM, P, Ox	169 225
284.		(29) Janus TERRA door l.	+	BM, P, B	159 226
285.		(47) Victory	+	BM, V, RT	318 241ff.
286.	NERO CAESAR AVG GERM IMP l.	(28) Janus TERRA door r.		Ox, ANS	
287.		(47) Victory	+	BM, RT H	318 245

<sup>1</sup> There is no external feature to distinguish Victory asses of Issue IV B from those of issue IV C, but they seem to have been struck concurrently with the two Janus temple types (see p. 83).



No.	Obverse	Reverse	Coll.	RIC	BMC
	<b>Issue IVC Copper. IMP as cognomen</b> Short obverse and short reverse legend A.D. 65 Head laur. r. or l.				
*288.	NERO CAESAR AVG GERM IMP r.	(41) Janus VBIQ door r.	+ BM, P, Ox	198	227
289.		(42) Janus VBIQ door l.	+ BM, P, RV	191	232
*290.		(47) Victory	+ BM, V, RT	318	241ff.
291.	NERO CAESAR AVG GERM IMP l.	(41) Janus VBIQ door r.	+ BM, P, RV <sup>1</sup>	198	228f.
292.		(42) Janus VBIQ door l.	Mil, ANS		
293.		(47) Victory	+ BM, RT, H	318	245
293A.	NERO CAESAR AVG GER IMP r.	(42) Janus VBIQ door l.	S		
	<b>Issue V Copper. IMP as praenomen</b> A.D. 66 Head laur. r. or l.				
*294.	IMP NERO CAESAR AVG GERM <sup>2</sup> r.	(41) Janus VBIQ door r.	+ BM, P, V	203	230
295.		(42) Janus VBIQ door l.	+ BM, RV, Ox	194	

<sup>1</sup> A coin in Oxford with these legends is struck on an undressed sestertius flan.

<sup>2</sup> Obv. dies of this issue (one with head r., the other with head l.) have been used to strike a curious two-headed coin in the ANS.

No.	Obverse	Reverse	Rome: Asses			
			Coll.	RIC	BMC	
*296.	IMP NERO CAESAR AVG GERM I.	(47) Victory	+	BM, P, RV	325	246ff.
297.		(41) Janus VBIQ door r.	+	BM, P, RT	203	231
298.		(42) Janus VBIQ door l.	+	BM, B, Her	194	
299.		(47) Victory	+	V, H, Ox	325	249
<b>Issue VI</b> Copper. IMP as praenomen A.D. 67 Head laur. r.						
*300.	IMP NERO CAESAR AVG GERMANIC r.	(42) Janus VBIQ door l.	+	BM, H, Mun	196	233
*301.		(47) Victory	+	BM, P, Ox	327	250
302.	IMP NERO CAESAR AVG GERMANIC I.	(41) Janus VBIQ door r.		Her		

Rome: Semisses					
No.	Obverse	Reverse	Coll.	RIC	BMC
SEMISSSES					
<b>Issue I</b> Copper. Without SC					
Rev. type of Roma (48) or Table (49)					
A.D. 62 Head laur. r.					
303.	A. CLAVDIVS ... GERM r.	(48) Roma	AC 15		
*304.	D. CLAVDIVS ... GERMANIC r.	(48) PON MAX TRP IMP PP	G (Wad) (Mz)		
305.	D. CLAVDIVS ... GERM r.	(48) PON MAX TRP IMP PP	BM (C) (Vie)		260
306.	A. CLAVDIVS ... GERM r.	(49) [CERTAMEN QVINQ ROM CO.	P (N) (Ox)	408	
*307.		(49) [CERTAM QVINQ ROM CO.	G (BM) (Vau)	407	259
<b>Issue II</b>					
No semisses					
<b>Issue III</b> Orichalcum with SC. Usually with mark of value S					
Rev. type of Roma (48) or Table (49)					
A.D. 64 Head laur. r., occasionally bare r.					
308.	NERO CLAV CAE AVG GER PM TRP IM laur. r.	(49) CERTA QVINQ ROM CO. S.	BM (P) (ANS)	404	274
309.	NERO CLAV CAE AVG GER PM TRP IM bare r.	(49) CERTA QVINQ ROM CO. S.	RT (N) (BI)		

*Rome: Semisses*

No.	Obverse	Reverse	Coll.	RIC	BMC
310.	NERO CAESAR AVG IMP TR POT PP laur r.	(49) CERT QVINQ ROM CO. S.	BM (RV) (C)	400	270
311.		(49) CER QVINQ ROM CO.	P (RV) (BM)	381	
312.	NERO CLAVDIVS CAESAR AVG GERMA bare r.	(49) CERT QVINQ ROM CO. S.	BM (RT) (Ox)	399	269
313.		(49) CER QVINQ ROM CO.	Ox	385	
314.	NERO CLAVD CAESAR GER laur. r.	(49) CERT QVINQ ROM CON. S.	Ox		
315.		(48) PON MA TRP IMP PP	BM (RT) (Ox)		280
316.	NERO CAESAR AVG IMP laur. r.	(49) CERTA QVINQ ROM CON. S.	BM (RV) (Ox)	406	
317.		(49) CER QVINQ ROM CO. S.	Ox, RT, Rec	379	267
318.		(48) Roma S TR POT PP	H, BM (RV)	271	283
319.	NERO CAESAR AVG IMP laur. l.	(49) CER QVINQ ROM CO. S.	Her		
320.	NERO CAES AVG IMP laur. r.	(49) CERTA QVINQ ROM CON. S.	BM, P, RV	405	275ff.
321.		(49) CERTA QVINQ ROM CON.	BM, Ox (H)		
322.		(49) CERTA QVINQ ROM CO. S.	BM, P, Mil	403	273
323.		(49) CERT QVINQ ROM CON. S.	Ox, BM, B	402	271f.
324.		(49) CERT QVINQ ROM CO. S	V (N) (Ox)		
325.		(49) CER QVINQ ROM CO. S	BM, P, RV	378	261ff.

Rome: Semisses

No.	Obverse	Reverse	Coll.	RIC	BMC
326.		(49) CER QVINQ ROM CO	BM		265
*327.		(49) CER QVINQ RMA CO. S	BM, P, C	377	268
328.		(48) PON MA TRP IMP PP	Ox, P		
329.		(48) PM TRP PP S	BM, RT, Ox	244	279
330.		(48) TR PON PP S	BM, RT, Ox	268	284
*331.		(48) TR POT PP S	Bo, BM, RV	270	281f.
332.	NERO CAE AVG IMP laur. r.	(49) CERT QVINQ ROM CON. S	BM (RT)	401	
			(Cam)		
333.		(49) CERT QVINQ ROM CO. S	N (Lau)		
334.		(49) CER QVINQ ROM CO. S	BM, T	380	266
335.		(48) TR PON PP S	BM	267	285

*Rome: Quadrantes*

No.	Obverse	Reverse	Coll.	RIC	BMC
	QUADRANTES				
	<b>Issue I</b> Copper. Without SC Obv. Owl or Column A.D. 62 Rev. Olive Branch (50)				
336.	NERO CLAUDIVS CAESAR AVG GERM Col	PON M TRP IMP PP	P (Ox) (RV)	434	
*337.	NERO CLAVD CAESAR AVG Col	GER PON MAX TRP IMP PP	G, RC, V	419	286
	<b>Issue II</b> Orichalcum. Without SC Obv. Owl or Column A.D. 63 Rev. Olive Branch (50)				
*338.	NERO CLAV CAESAR AVG GER	PON M TRP IMP PP	V, RV (Man)		293
339.	NERO CLA CAE AVG GERM Col	PM TRP IMP PP	BM		292
340.	NERO CLA CAE AVG GER Col	PM TRP IMP PP	BM		
340A.	NERO CL CAE AVG GER Owl	PM TRP IMP PP	ANS		
	<b>Issue III</b> Orichalcum. With SC Types as <b>Issue II</b> A.D. 64 Sometimes with rev. mark of value :				
*341.	NERO CLAVD CAESAR AVG	GER PM TRP IMP PP : +	V, P, BM	418	

No.	Obverse		Reverse		Coll.	RIC	BMC
342.	NERO CLAV	CAE	AVG	Owl	BM, P, RT <sup>1</sup>	411	298ff.
342A.	NERO CLAV	CAE	AVG	Owl	RV, N, RC		
343.	NERO CLAV	CAESAR	AVG GER	Col	BM	416	297
344.	NERO CLA	CAE	AVG GER	Owl	P	410	
345.	NERO CL	CAE	AVG	Col	V	435	
346.	NERO CLAV	CAE	AVG	Owl	BM, V, (RT)	412	302
347.	NERO CL	CAE	AVG	Col	P (RV) ANS	423	
347A.	NERO CLAVD	CAESAR	AVG	Col	Maz		
348.	NERO CLAVD	CAESAR	AVG GE	Col	BM	431	
*349.	NERO CLA	CAE	AVG GER	Owl	RV		
349A.	NERO CLA	CAE	AVG GER	Owl	BM, P		
350.	NERO CLAV	CAE	AVG GER	Col	Cam, Mil, RC		
351.	NERO CLAV	CAE	AVG GER	Owl	Cam		
352.	NERO CLA	CA	AVG GER	Owl	BM	413	301
353.	NERO CLAV	CAE	AVG GER	Col	BM, RC, RV	428	294
*354.	NERO CLAV	CAE	AVG GER	Owl	RV, G, H	414	
355.	NERO CLA	CAES	AVG GER	Col	P	425	
356.	NERO CL	CAE	AVG GER	Col	P (BM) (RD)	424	291

<sup>1</sup> An example in the ANS has an additional SC on the obverse under the altar. A coin in Turin, and another in Oxford with these legends, are struck on a copper As flan.

Rome: Quadrantes						
No.	Obverse	Reverse	Coll.	RIC	BMC	
<b>Issue IV A</b> Copper with SC. No Mark of value						
	Obv. Owl or Column					
	A.D. 65	Rev. Olive Branch (50)				
357.	NERO CLAVD CAES	AVG GER Owl	PM TRP IMP PP	Bl	415	287
358.	NERO CLAVD CAE	AVG GER Col	BM, RV, B			
359.	NERO CLAV CAE	AVG GER Col	L, B, Bl	428		
*360.	NERO CLAV CAE	AVG GER Owl	V, BM, Bl	414		288f.
<b>Issue IV B</b> Copper with SC. No mark of value						
	A.D. 65	Rev. type (51) Column				
361.	NERO CLAV CAE	AVG GER Owl	PM TRP IMP PP $\frac{1}{SC}$	P		
*362.	NERO CLAV CAE	AVG GER Owl	PM TRP IMP PP $\frac{1}{SC}$	BM, Bi, T		290



*Lugdunum: Sestertii*

No.	Obverse	Reverse	Coll.	RIC	BMC
<b>Lugdunum</b>					
<b>SESTERTII</b>					
<b>Issue L-III IMP as cognomen</b>					
A.D. 65 Head laur. r., globe and aegis					
401.	A. CLAVD ... GER IMP PP r.	(21) Adlocutio	RV		
402.		(22) Annona	BM, ANS, BM		306 <sup>1</sup>
<b>Issue L-IV A IMP as cognomen</b>					
A.D. 65 Head laur. r. or l., early globe					
403.	A. CLAVD ... GER ... IMP P r.	(25) Decursio r.	AC 13, Hall		
403A.	A. CLAVD ... GER ... IMP P l.	(21) Adlocutio	P		
404.		(22) Annona	RT		
*405.	A. CLAVD ... GER ... IMP PP r.	(21) Adlocutio	BM (P) (Ry)		303
*406.		(22) Annona	BM, H, Mil		305
407.		(23) Congiarium l.	S		
408.		(25) Decursio r.	BM, Cir, T		311
409.		(31) Roma, vict. and paraz.	P, Ox, Hall		
410.		(35) Arch	V, Ox, RV		
411.	A. CLAVD ... GER ... IMP PP l.	(21) Adlocutio	C, G, Sof		

<sup>1</sup> The aegis is omitted in the BMC description.

Lugdunum: Sestertii						
No.	Obverse	Reverse	Coll.	RIC	BMC	
412.	Issue L-IVB IMP as cognomen A.D. 65      Head laur. r. or l., more developed globe	(22) Annona	+ T, Sof, B			
413.		(25) Decursio r.	Ly			
414.		(35) Arch	+ BM, P, Ox <sup>1</sup>		330	
415.	A. CLAVD ... GER ... IMP PP r.	(21) Adlocutio	+ Ox, B, Bem	62f.		
416.		(22) Annona	+ G, RT, P	73		
417.		(23) Congiarium l.	B, Ox (V)	109		
418.		(25) Decursio r.	+ Ox, BM, M	128	312f.	
*419.		(28) Janus TERRA door r.	+ BM, Ox, M	173	319	
*420.		(30) Ostia	+ Sa, P, Ox	101	323	
421.		(31) Roma vict. and paraz.	+ BM, P, RV	207	324f.	
422.		(35) Arch	+ BM, P, Ox	149	329	
423.		A. CLAVD ... GER ... IMP PP l.	(22) Annona	+ BM, P, S	73	307
424.			(23) Congiarium l.	+ H, P, Hall	110	
425.	(25) Decursio r.		+ H, S, P <sup>2</sup>	128		
426.	(28) Janus TERRA door r.		+ Ox, B, ANS	173	320	
427.		(30) Ostia	BM	102		

<sup>1</sup> An example in the Hermitage with these types and legends has obv. legend reading outwardly ☉  
<sup>2</sup> An example in Madrid with these types has the obv. legend reading outwardly ☉.

*Lugdunum: Sestertii*

No.	Obverse	Reverse	Coll.	RIC	BMC
*428. 429.		(31) Roma vict. and paraz. (35) Arch	+ Ox, P, B V	207 149	
<b>Issue L-V IMP as praenomen</b> Longer forms of obverse legend A.D. 66 Head laur. r. or l. globe					
430.	C. PONTIF MAX TRIB POT PP r.	(21) Adlocutio	Mun (B) (N)	69	
431.		(22) Annona	M (Ly) Lob	83	
*432.		(23) Congiarium l.	V	114	
433.		(24) Congiarium r.	BM (B) (Schey)	126	310
434.		(25) Decursio r.	BM (P) (RT)	137	318
435.	C. PONTIF MAX TRIB POT PP l.	(22) Annona	V, Nim		
436.		(28) Janus TERRA door r.	BM (Ox)	188	322
437.	C. PONT MAX TR POT PP r.	(21) Adlocutio	M, Al (Ox)		
438.		(22) Annona	ANS, Mon	81	
*439.		(23) Congiarium l.	BM, ANS, BM	113	308
440.		(25) Decursio r.	Hall	136	
441.		(28) Janus TERRA door r.	P, M, BM	187	321
*442.		(31) Roma vict. and paraz.	Ox (BM) S of	216	327
443.		(35) Arch	BM, AC 15	157	332
444.	C. PONT MAX TR POT PP l.	(21) Adlocutio	BM, RT, Ox	68	304
445.		(22) Annona	V, P, Ox	82	

*Lugdunum: Sestertii*

No.	Obverse	Reverse	Coll.	RIC	BMC
446.		(23) Congiarium l.	RT, Sig, Lau	125	
447.		(24) Congiarium r.	P	136	316f.
448.		(25) Decursio r.	BM, P, V	187	
449.		(28) Janus TERRA door r.	Ox, Bl (P)	105	
450.		(30) Ostia	Hof	216	328
451.		(31) Roma vict. and paraz.	BM, M, RC	157	333f.
*452.		(35) Arch	BM, P, Ox		
453.	C. PONT MAX TR P PP r.	(22) Annona	Cahn 60		
454.		(23) Congiarium l.	BM		
455.		(31) Roma vict. and paraz.	M		
456.		(35) Arch	AC 15		
457.	C. P MAX TRIB POT PP l.	(21) Adlocutio	M		
458.		(30) Ostia	Ram		
<b>Issue L-VI IMP as praenomen</b>					
Shorter forms of obverse legend					
A.D. 67	Head laur. r. or l., globe				
C. P. MAX TR POT PP r.		(21) Adlocutio	M		
459.		(22) Annona	P, M, AI		
460.		(23) Congiarium l.	Bel		
461.		(25) Decursio r.	BM (B), ANS		
462.		(28) Janus TERRA door r.	AI		
463.					315
					191

*Lugdunum: Sestertii*

No.	Obverse	Reverse	Coll.	RIC	BMC
464.		(30) Ostia	Hall	104	
465.		(31) Roma vict. and paraz.	Faur	215	
466.		(35) Arch	BM	156	331
467.	C. P. MAX TR POT PP 1.	(21) Adlocutio	ANS		
468.		(22) Annona	P, MRA	80	
469.		(25) Decursio r.	BM, RT, C	135	
470.		(30) Ostia	+ MRA, Al, Ram		
471.		(31) Roma vict. and paraz.	Ox, Her	215	
472.		(35) Arch	Ox, P (H)	156	
473.	C. P MAX TR P PP r.	(22) Annona	+ R, RT, ANS	79	
*474.		(25) Decursio r.	+ V, BM, P	134	314
475.		(28) Janus TERRA door r.	+ V, Ox, M		
476.		(30) Ostia	V		
477.		(31) Roma vict. and paraz.	+ BM, B, S		
478.		(35) Arch	H	213	326
479.	C. P MAX TR P PP 1.	(22) Annona	Ox, V (N)		
480.		(25) Decursio r.	M		
481.		(28) Janus TERRA door r.	B	184	
482.		(30) Ostia	P	103	
483.		(31) Roma vict. and paraz.	Ox, RT (W)	214	
484.	C. P M TR POT PP r.	(22) Annona	Her		
485.		(25) Decursio r.	Col		

<i>Lugdunum: Sesterii</i>					
No.	Obverse	Reverse	Coll.	RIC	BMC
486.	C. PM TR POT PP r.	(31) Roma vict. and paraz.	M		
487.	C. PM TR POT PP l.	(22) Annona	M		
488.		(25) Decursio r.	M		
489.	C. PM TR P PP r.	(22) Annona	M, H		

No.	Obverse	Reverse	Coll.	RIC	BMC
<b>DUPONDII</b>					
<b>Issue L-III IMP as cognomen</b>					
Securitas II, Victoria II, Macellum					
A.D. 64 Head rad. r., globe					
*490.	A. CLAVD ... GER ... IMP P r.	(36) Macellum	P (L) Man		
491.		(37) Securitas	BM, May, May		
*492.		(39) Victoria l. wk.	P, Ox, May		
*493.	A. CLAVD ... GER ... IMP PP r.	(36) Macellum	BM, LG, Wui,	276	335
			Al		
*494.		(37) Securitas	Ox, BM, Pte	291	338
			LG		
*495.		(39) Victoria l. wk.	G, Bl, Webb	307	
*496.		(38) Victoria l.	BM, Cir ( <i>May</i> )		
<b>Issue L-IV A IMP as cognomen</b>					
Securitas II, Victoria II, Macellum.					
A.D. 65 Head laur. r. or l., globe					
497.	A. CLAVD ... GER ... IMP l.	(37) Securitas	Mun		
498.	A. CLAVD ... GER ... IMP P r.	(36) Macellum	RT, Mun, Her		
499.		(37) Securitas	Bl	293	
500.		(39) Victoria l. wk.	P, Ly	306	
*501.	A. CLAVD ... GER ... IMP P l.	(36) Macellum	P, Mun, Mil		

<i>Lugdunum: Dupondii</i>					
No.	Obverse	Reverse	Coll.	RIC	BMC
*502.		(37) Securitas	H (BM), AI		
*503.		(39) Victoria 1. wk.	BI, BM, P	306	350
504.	A. CLAVD ... GER ... IMP PP r.	(36) Macellum	RV, ANS	277	
505.		(37) Securitas	Ox, RV, Her	290	
506.		(39) Victoria 1. wk.	G, BM, P		
507.	A. CLAVD ... GER ... IMP PP l.	(36) Macellum	BM, P, N	277	336f.
508.		(37) Securitas	Ox, BM, P	290	339
509.		(39) Victoria 1. wk.	RT, Ox, P		351
510.	A. CLAVDIVS ... GER ... IMP P r.	(37) Securitas	May		
511.		(39) Victoria 1. wk.	RV	296	
<b>Issue L-IVB IMP as cognomen</b>					
Secuntas and Victoria					
A.D. 65 Head laur. r. or l., globe					
512.	A. CLAVD ... GER ... IMP P r.	(37) Securitas	Ox		
513.		(39) Victoria 1. wk.	BM, P, Ox		
514.	A. CLAVD ... GER ... IMP P l.	(39) Victoria 1. wk.	BM, P		
*515.	A. CLAVD ... GER r.	(37) Securitas	Ox, BM (P)	285	
516.		(39) Victoria 1. wk.	Ox, B, Nij	301	
517.	A. CLAVD ... GER l.	(37) Securitas	P, BM, Ox	285	340
*518.		(39) Victoria 1. wk.	BM, Cam, Man	301	352



*Lugdunum: Dupondii*

No.	Obverse	Reverse	Coll.	RIC	BMC
<b>Issue L-V IMP as praenomen</b>					
Secuntas and Victoria <u>S C</u>					
A.D. 66	Head laur. r. or l., globe				
519.	C. P MAX TR POT PP r.	(37) Secuntas	H, ANS, Lob	287	
520.		(39) Victoria l. wk.	Ox, Mil, Glen <sup>2</sup>		
521.	C. P MAX TR POT PP l.	(37) Secuntas	BM (H) (Ox)	287	343
522.		(39) Victoria l. wk.	Ox, P, Cam	305	
523.	C. P MAX TR P PP r.	(37) Secuntas	BM, P, RV	286	341
524.		(39) Victoria l. wk.	BM, P, RT	304	353ff.
*525.	C. P MAX TR P PP l.	(37) Secuntas	BM, Her, B	286	342
526.		(39) Victoria l. wk.	BM, P, RV	304	356ff.
<b>Issue L-VI IMP as praenomen</b>					
Secuntas <u>SC</u> <sup>1</sup> , Victoria <u>S C</u> <sup>1</sup>					
A.D. 67	Head laur. r. or l., globe				
527.	C. P MAX TR POT PP r.	(37) Secuntas	ANS, Bl		
528.		(39) Victoria l. wk.			
529.	C. P MAX TR POT PP l.	(37) Secuntas	P, Bl, Cahn 69		
530.		(39) Victoria l. wk.			
531.	C. P MAX TR P PP r.	(31) Secuntas	BM, P, RT		344ff.

<sup>1</sup> There is no external feature to distinguish Victoria dupondii of Issue VI from those of Issue V, but the study of dies demonstrates that the Victoria type was struck concurrently with the new Secuntas type of Issue VI

<i>Lugdunum: Dupondii</i>						
No.	Obverse	Reverse		Coll.	RIC	BMC
532.	C. P MAX TR P PP I.	(39) Victoria l. wk.				
*533.		(37) Securitas	+	Ox, BM, P		
*534.	C. P M TR P PP r.	(39) Victoria l. wk.	+	BM, Bl, Col		347ff.
*535.		(37) Securitas		Ox		
536.		(39) Victoria l. wk.		May, MRA	303	

<i>Lugdunum: Asses</i>					
No.	Obverse	Reverse	Coll.	RIC	BMC
	<b>ASSES</b>				
	<b>Issue L-III</b> Orichalcum. Rev. mark of value $\bar{\Gamma}$ A.D. 64 Head laur r. globe, l. without globe				
537.	NERO CLAVD CAESAR AVG GERMANI r.	(44) Apollo	V ( <i>Her</i> ) ( <i>Fr</i> )		
*538.		(46) Genius	BM ( <i>Cir</i> ) P	347	
*539.	NERO CLAVD CAESAR AVG GERMANIC l.	(44) Apollo	BM (H) (V)	370	255
*540.		(46) Genius	P		
	<b>Transitional Group</b> Copper. Rev. mark of value $\bar{\Gamma}$ A.D. 64 Head bare r. or l., globe				
*541.	NERO CLAVD CAESAR AVG GERMANICVS r.	(44) Apollo TRPOT	C (May), <i>May</i>		
*542.	NERO CLAVD CAESAR AVG GERMANICVS l.	(44) Apollo TRPOT	BM (P), May	372	237
	<b>Issue L-IV A</b> Copper. No mark of value A.D. 65 Head bare r. or l. globe				
543.	NERO CLAVD CAESAR AVG GERMANICVS r.	(44) Apollo TRPOT	+	364	376
*544.		(46) Genius	BM ( <i>May</i> ), Al		368

*Lugdunum: Asses*

No.	Obverse	Reverse	Coll.	RIC	BMC
545.	NERO CLAVD CAESAR AVG GERMANICVS I.	(28) Janus TERRA door r.	SHer	178	
546.		(47) Victory	May, May, May	324	
*547.		(44) Apollo TRPOT	BM, P, RT	364	377
548.		(45) Ara	May		
549.		(46) Genius	Tr	343	
550.		(47) Victory	May, ANS, <sup>1</sup>	323	
551.	NERO CSAVD CAESAR AVG	(44) Apollo TRPOT	May	364	
551A.	GERMANICV r. NERO CLAVD CAESAR AVG GERMANICV I.	(44) Apollo TRPOT	SVer		
			BI		
552.	<b>Issue L-IVB</b> Copper. IMP as cognomen A.D. 65 Head bare r. or l., globe				
553.	A. CLAVD ... GER ... IMP r.	(44) Apollo TRPOT	P		
554.		(45) Ara	Newd		
555.		(46) Genius	Ve, May		
556.		(28) Janus TERRA door r. (47) Victory	Cam Ox, San (May)	319	

<sup>1</sup> On this coin the legend on the shield is SCPR. See RIC 232

*Lugdunum: Asses*

No.	Obverse	Reverse		Coll.	RIC	BMC
557.	A. CSAVD ... GER ... IMP I.	(44) Apollo TRPOT		Ox		
558.		(45) Ara		May		
559.		(46) Genius		BM, H		
560.		(47) Victory	+	RT, May, May	319	
*561.	A. CLAVD ... GER ... IMP P r.	(45) Ara	+	BM, V, BI		360
562.		(46) Genius	+	BM, P, May		367
*563.		(28) Janus TERRA door r.	+	BM, BI, SVer		374
564.		(47) Victory	+	Ox, P, RV	320	
565.	A. CLAVD ... GER ... IMP P I.	(44) Apollo TRPOT		Mac		
566.		(45) Ara	+	Ox, Mil, May		
*567.		(46) Genius	+	BM, G, B		369
568.		(28) Janus TERRA door r.		Mil ( <i>Car</i> ), P		
569.		(47) Victory	+	P, H, Her		
570.	A. CLAVD ... GER ... IMP PP r.	(44) Apollo TRPOT	+	P, Ox, May <sup>1</sup>	365	
571.		(45) Ara	+	P, Ox, V	315	360ff.
572.		(46) Genius	+	BM, B, May	338	366
573.		(28) Janus TERRA door r.		P, Mun (W)	176	
*574.		(47) Victory	+	BM, Ox, Mil	321	378f.
575.	A. CLAVD ... GER ... IMP PP I.	(44) Apollo TRPOT		May	365	
576.		(45) Ara	+	BM, P, ANS	315	363

<sup>1</sup> The coin in Mayenne has CLAD (sic) for CLAVD.

<i>Lugdunum: Asses</i>					
No.	Obverse	Reverse	Coll.	RIC	BMC
577.	<b>Issue L-V IMP as praenomen</b> A.D. 66 Head bare r. or l., globe	(46) Genius	+ Cir, May, G	176	
578.		(28) Janus TERRA door r.	+ P, Bl	321	380
579.		(47) Victory	+ BM, P, Ox		
580.	C. PONTIF MAX TRIB POT PP r.	(46) Genius	May (Y)		
581.		(47) Victory	BM	331	390
582.	C. PONTIF MAX TRIB POT PP l.	(45) Ara	May		
583.		(47) Victory	May	331	
*584.	C. P MAX TR POT PP r.	(45) Ara	BM, M, M	317	365
585.		(46) Genius	P, BM		
586.		(28) Janus TERRA door r.	Ox (RT), Cir		
587.		(47) Victory	BM, P, V	330	389
588.	C. P MAX TR POT PP l.	(45) Ara	Ly, Col (Cam)	317	
589.		(47) Victory	W, May		
590.	C. P MAX TR P PP r.	(45) Ara	P, N, B	317	
*591.		(46) Genius	BM, Ox, RT	342	370
592.		(28) Janus TERRA door r.	BM, P, May	185	375
*593.		(47) Victory	BM, P, V	329	381ff.
594.	C. P MAX TR P PP l.	(45) Ara	P, P	317	
595.		(46) Genius	BM, P, RT	342	371

*Lugdunum: Asses*

No.	Obverse	Reverse	Coll.	RIC	BMC
596.	C. P MAX TR PP l.	(47) Victory	+ BM, P, RV	329	387f.
597.	C. P M TR POT PP r.	(47) Victory	Sp		
598.		(45) Ara	+ BM, RT, Ox	316	364
*599.		(28) Janus TERRA door r.	BM, P, May	183	
599A.		(47) Victory	P		
600.	C. P M TR P PP r.	(46) Genius	H		
601.		(47) Victory	LG, Tr		
<b>Issue L-VI</b>					
	A.D. 67 Victory as Issue V <sup>1</sup>				
602.	C. P MAX TR P PP r.	(47) Victory	+ BM, P, V	329	381
603.	C. P MAX TR P PP l.	(47) Victory	+ BM, P, RV	329	387

<sup>1</sup> There is no simple feature to distinguish Victory Asses of Issue VI from those of Issue V, but there are good reasons for supposing that the Victory Asses were struck parallel with the sestertii and dupondii of Issue VI (see p. 107).

*Lugdunum: Semisses*

No.	Obverse	Reverse	Coll.	RIC	BMC
	SEMISSSES				
	<b>Issue L-III</b> Orichalcum				
	Rev. type of Table (49)				
	A.D. 64	Head laur. r. globe			
*604.	NERO CLAV CAESAR AVG   (49) CER QVIN ROM CON				
	<b>Issue L-IV A</b> Copper. Full legend GERMANICVS				
	Rev. types of Roma (48) or Table (49)				
	A.D. 65	Head bare r. or l., globe	P (BM) (ANS)		
605.	NERO CLAVD CAESAR				
	AVG GERMANICVS r.				
	(48) PONTIF MAX TR POT IMP PP				
606.	(48) PONTIF MA TR P IMP PP				
607.	(49) CER QVINQ ROM CON				
*608.	(48) PONTIF MAX TR POT IMP PP				
	AVG GERMANICVS l.				
	(49) CER QVINQ ROMAЕ CONS				
*609.	<b>Issue L-IV B</b> Copper. Shorter abbreviation of GERMANICVS				
	Rev. types of Roma (48) or Table (49)				
	A.D. 65	Head bare r. or l., globe	Mac Ox (L), ANS BM (Ox)	262	401
	(49) CER QVINQ ROMAЕ CONS				
	BM (RT) (Ox)				
610.	NERO CLAVD CAESAR				
	AVG GERMAN l.				
	(48) PONTIF MAX TR POT IMP PP				
	B1				



*Lugdunum: Semisses*

No.	Obverse	Reverse	Coll.	RIC	BMC
611.	NERO CLAVD CAESAR AVG GERMA r.	(48) PONTIF MAX TR POT IMP PP	Nij, ANS		
612.		(48) PONTIF MAX TR P IMP PP	BM, P		
613.		(49) CER QVING ROM CON	V (RT) ( <i>Bl</i> )	391	
614.	NERO CLAVD CAESAR AVG GERM r.	(48) PONTIF MAX TR POT IMP PP	BM (S) ( <i>M</i> )	260	399
*615.		(48) PONTIF MAX TR P IMP PP	BM, Ox, G	253	
*616.		(49) CER QVING ROM CON	BM ( <i>SVer</i> ), BI	388	
617.	NERO CLAVD CAESAR AVG GERM l.	(48) PONTIF MAX TR POT IMP PP	BM	260	400
618.		(48) PONTIF MAX TR P IMP PP	Ox, BM, H	253	398
619.		(49) CER QVING ROM CON	BM, P, V	389	392
<b>Issue L-V Copper. IMP as praenomen</b>					
Rev. types of Roma (48) and Table (49)					
A.D. 66 Hcad bare r. or l., globe					
620.	IMP NERO CAESAR AVG r.	(48) PONTIF MAX TR POT IMP PP	BM, Ox ( <i>Mun</i> )	263	402
621.		(48) PONTIF MAX TR POT PP	Bl	257	
622.		(48) PONTIF MAX TR P PP	Ox, P	252	
623.		(49) CER QVING ROM CON	Mor		
624.	IMP NERO CAESAR AVG l.	(48) PONTIF MAX TR POT PP	BM (M) ( <i>Ox</i> )	257	403

*Lugdunum: Semisses*

No.	Obverse	Reverse	Coll.	RIC	BMC
625.	IMP NERO CAESAR AVG PONTIF r.	(48) PONTIF MAX TR POT PP	BM, <sup>1</sup> ANS <sup>2</sup>	259	
*626.		(48) MAX TRIB POT PP	V, RT, Webb	242	
627.		(49) CER QVINQ ROMAEC CON	M	396	
628.	IMP NERO CAESAR AVG PONTIF l.	(48) MAX TRIB POT PP	Webb	242	
629.		(49) CER QVINQ ROMAEC CON	P (Ox) (C)	396	
*630.	IMP NERO CAESAR AVG PONT r.	(48) MAX TRIB POT PP	H, (P) (M)	241	
630A.		(48) PONTIF MAX TR POT PP	Maz		
*631.		(49) CER QVINQ ROMAEC CON	RV, BM, Ox	395	393
632.	IMP NERO CAESAR AVG PONT l.	(49) CER QVINQ ROMAEC CON	BM, M		395
633.	IMP NERO CAESAR AVG P MAX r.	(48) TRIB POT PP	BM (P) (RT)	272	404

<sup>1</sup> This BM coin (formerly in the Walters Coll.) is in orichalcum and weighs 8.45 gm. It seems to be an orichalcum As flan struck with copper semis dies.

<sup>2</sup> The end of the obverse legend of this ANS coin is not clear.

## PATTERNS AND TRIAL STRIKINGS

In addition to the varieties that form part of the normal issues of Nero, there are some extremely rare coins in good style, sometimes die-linked with the normal varieties of regular issues, which seem to have been intended as trial striking or patterns. Some are uniface; others are struck on the flan of a different denomination—presumably because such flans were readily available from current or recent minting operations, whereas flans for the denominations for which the new dies were being prepared may not have been available; others are overstruck on coins of closely contemporary date with different types.

The following seem to have been intended as trial striking or patterns:

	<i>Cat. no.</i>	<i>Dies</i>	<i>Flan</i>	<i>Wt.</i>	<i>Coll.</i>	
ROME	70 ff.	Sest. Obv. (uniface)	Sest.	—	Hel 1927	
	197 ff.	Dup. Obv. (uniface)	Sest.	29.54 gm.	BM	(PLATE XXII, q)
	262	O. As	Dup.	15.55 gm.	BM	
	291	C. As	Sest.	29.47 gm.	Ox	
	306/7	C. Sem. Obv. (overstrike)	C. As	14.94 gm.	BM	(PLATE XXII, r)
	306/7	C. Sem. Obv. (overstrike)	C. As	—	S	
	342	C. Q.	C. As	—	T	(PLATE XXII, s)
	342 f.	C. Q.	C. As	10.24 gm.	Ox	(PLATE XXII, t)
LUGDUNUM	430 ff.	Sest. Obv. (uniface)	Sest.		RV	
	452	Sest. (overstrike)	C. As	8.25 gm.	BM	(PLATE XXII, o)
	625	C. Sem.	O. As		BM	(PLATE XXII, r)

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NERO CAES AVG IMP	Sest. 135-136
NERO CAE AVG IMP	O. Sem. 310-311
NERO CLAVDIVS CAESAR AVG GERM PM TRP IMP PP	O. Sem. 316-319
	O. Sem. 320-331
	O. Sem. 332-333
	Sest. 70-78, 84-95
	Dup. 177-179, 181, 189-191
	C. As 242, 152
	C. Sem. 303, 306, 307
NERO CLAVDIVS CAESAR AVG GERM PM TRP IMP P	Dup. 182
NERO CLAVDIVS CAESAR AVG GER PM TRP IMP PP	Sest. 103-117, 137-144
	Dup. 197-202, 213, 214, 221-223
	O. As 266
	C. As 278
NERO CLAVDIVS CAESAR AVG GER PM TRP IMP P	Dup. 510, 511
NERO CLAVDIVS CAESAR AVG GERMANICVS	O. As 257-259
NERO CLAVDIVS CAESAR AVG GERMANIC	C. As 246, 247
	O. As 262-265, 272
	C. Sem. 304
NERO CLAVDIVS CAESAR AVG GERMAN	C. As 248
NERO CLAVDIVS CAESAR AVG GERMA	C. As 249, 250
	O. Sem. 312, 313



NERO CLAVDIVS CAESAR AVG GERM	C. Sem. 305
NERO CLAVD CAESAR AVG GERM PM TRP IMP PP	C. Q. 336
	Sest. 79-82, 96-102
	Dup. 180; 183, 184, 192-196
	C. As 243, 244, 252
	O. As 261, 267, 270, 271
NERO CLAVD CAESAR AVG GERM PM TRP IMP P	Dup. 185
	C. As 253
NERO CLAVD CAESAR AVG GERM PM TRP IMP	C. As 245
NERO CLAVD CAESAR AVG GER PM TRP IMP PP	Sest. 83, 118-134, 145-154, 401, 402, 405-429
	Dup. 493-496, 504-509, 515-518
	C. As 254-256, 277, 279-282, 570-579
	O. As 269, 276
NERO CLAVD CAESAR AVG GER PM TRP IMP P	Sest. 403-404
	Dup. 185, 490-492, 498-503, 512-514
	C. As 253, 561-569
NERO CLAVD CAESAR AVG GER PM TRP IMP	Dup. 497
	O. As 268
	C. As 552-560
	C. As 541-550
	O. As 273
NERO CLAVD CAESAR AVG GERMANICVS	C. Sem. 605-609
	C. As 551
NERO CLAVD CAESAR AVG GERMANICV	O. As 260, 274, 539, 540
NERO CLAVD CAESAR AVG GERMANIC	O. As 275, 537, 538
NERO CLAVD CAESAR AVG GERMANI	C. Sem. 610
NERO CLAVD CAESAR AVG GERMAN	C. Sem. 611-613
NERO CLAVD CAESAR AVG GERMA	C. Sem. 614-619
NERO CLAVD CAESAR AVG GERM	O. Sem. 314, 315
NERO CLAVD CAESAR AVG GER	O. Q. 348
NERO CLAVD CAESAR AVG GE	C. Q. 337
NERO CLAVD CAESAR AVG	O. Q. 341
	C. Q. 357
	C. Q. 358
NERO CLAVD CAES AVG GER	
NERO CLAVD CAE AVG GER	

NERO CLAV CAE AVG GER PM TRP IM  
NERO CLAV CAESAR AVG GER  
NERO CLAV CAESAR AVG  
NERO CLAV CAE AVG GER  
  
NERO CLAV CAE AVG  
NERO CLA CAES AVG GER  
NERO CLA CAE AVG GERM  
NERO CLA CAE AVG GER  
NERO CLA CA AVG GER  
NERO CL CAE AVG GER  
NERO CL CAE AVG  
PACE PR TERRA MARIQ PARTA IANVM CLVSIT SC  
  
PACE PR VBIQ PARTA IANVM CLVSIT SC  
  
PONTIF MAX TR POTEST IMP PP SC  
PONTIF MAX TR POT IMP PP  
PONTIF MAX TR POT IMP PP SC  
  
PONTIF MAX TR P IMP PP  
PONTIF MAX TR P IMP PP SC  
  
PONTIF MAX TR POT PP SC  
PONTIF MAX TR P PP SC  
PONTIF MA TR P IMP PP SC  
PON MAX TR P IMP PP  
PON MA TR P IMP PP SC

PON M	TR P IMP PP	C. Q. 336
PON M	TR P IMP PP SC	C. Q. 338
P M	TRP IMP PP	O. Q. 345
P M	TRP IMP PP SC	O. Q. 339-340A
		C. Q. 357-362
P M	TRP PP S SC	O. Q. 346-356
PORT AVG SC		O. Sem. 329
ROMA SC		Sest. 420, 427, 450, 458, 464, 470, 476, 482
		Sest. 135, 137, 138, 141, 142, 145-147, 150-152,
		155, 158, 160, 161, 163, 164, 167-169, 172-174,
		176, 409, 421, 429, 442, 451, 455, 465, 471, 477,
		483, 486
		Dup. 211, 216, 217, 220, 221, 223, 225, 227, 233,
		234, 237, 239-241
SC		Sest. 90, 95, 101, 111, 117, 126, 134, 175, 410, 414,
		422, 429, 443, 452, 456, 466, 472, 478
SCPR SC		C. As 550
SECVRITAS AVGVSTI		Dup. 183, 187
SECVRITAS AVGVSTI SC		Dup. 190, 193, 955, 198, 201, 204, 212, 491, 494,
		497, 499, 502, 505, 508, 510, 512, 515, 517, 519,
		521, 523, 525, 527, 529, 531, 533, 535
		C. As 278, 279, 282, 285, 287, 290, 293, 296, 299,
		301, 546, 550, 556, 560, 564, 569, 574, 579, 581,
		583, 587, 589, 593, 596, 597, 601-603
		C. Sem. 633
TRIB POT PP SC		O. Sem. 330-335
TR PON PP S SC		O. Sem. 318, 331
TR POT PP S SC		Dup. 177-9, 181, 182, 185, 188, 230
VICTORIA AVGVSTI		Dup. 191, 194, 196, 199, 200, 205, 206, 208, 209,
VICTORIA AVGVSTI SC		492, 495, 496, 500, 503, 506, 509, 511, 513, 514,
		516, 518, 520, 522, 524, 526, 528, 530, 532, 534,
		536

## CONCORDANCE: BMC—MAC DOWALL

(+ — excluded from Mac Dowall—see below)

BMC	MAC DOWALL	BMC	MAC DOWALL	BMC	MAC DOWALL
1	2	45	20	89	28
2	2	46	20	90	60
3	36	47	52	91	60
4	1	48	52	92	60
5	1	49	21	93	60
6	35	50	21	94	31
7	3	51	21	95	31
8	37	52	23	96	64
9	4	53	23	97	64
10	4	54	55	98	66
11	34	55	55	99	68
12	5	56	22	100	68
13	5	57	22	101	29
14	39	58	22	102	29
15	7	59	22	103	29
16	40	60	54	104	61
17	8	61	24	105	61
18	8	62	24	106	61
19	8	63	56	107	69
20	41	64	26	108	69
21	9	65	26	109	+
22	9	66	26	110	+
23	10	67	25	111	136
24	43	68	25	112	136
25	11	69	25	113	170
26	44	70	25	114	168
27	12	71	25	115	168
28	12	72	25	116	168
29	13	73	25	117	168
30	46	74	57	118	168
31	14	75	57	119	174
32	47	76	57	120	240
33	15	77	30	121	240
34	15	78	30	122	118
35	48	79	32	123	118
36	16	80	65	124	84
37	49	81	27	125	84
38	49	82	27	126	76
39	17	83	59	127	119
40	18	84	59	128	119
41	18	85	59	129	128
42	50	86	67	130	104
43	19	87	28	131	120
44	51	88	28	132	120

BMC	MAC DOWALL	BMC	MAC DOWALL	BMC	MAC DOWALL
133	+	181	160	229	291
134	105	182	160	230	294
135	113	183	126	231	297
136	106	184	134	232	289
137	106	185	111	233	300
138	87	186	111	234	254
139	107	187	111	235	246
140	88	188	117	236	250
141	93	189	117	237	542
142	131	190	95	238	244
143	108	191	203	239	+
144	108	192	203	240	278
145	114	193	207	241	285 & 290
146	89	194	207	242	285 & 290
147	94	195	197	243	285 & 290
148	109	196	180	244	285 & 290
149	109	197	184	245	287 & 293
150	109	198	215	246	296
151	109	199	210	247	296
152	115	200	218	248	296
153	115	201	226	249	299
154	79	202	235	250	301
155	78	203	222	251	276
156	148	204	236	252	269
157	148	205	225	253	271
158	148	206	225	254	275
159	148	207	211	255	539
160	153	208	227	256	272
161	139	209	237	257	260
162	162	210	220	258	262
163	165	211	+	259	307
164	140	212	212	260	305
165	140	213	198	261	325
166	+	214	205	262	325
167	159	215	205	263	325
168	146	216	205	264	325
169	146	217	205	265	326
170	138	218	205	266	334
171	161	219	196	267	317
172	161	220	191	268	327
173	145	221	185	269	312
174	145	222	206	270	310
175	145	223	209	271	323
176	145	224	230	272	323
177	145	225	283	273	322
178	150	226	284	274	308
179	150	227	288	275	320
180	137	228	291	276	320

Concordance: BMC

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BMC	MAC DOWALL	BMC	MAC DOWALL	BMC	MAC DOWALL
277	320	320	426	363	576
278	320	321	441	364	598
279	329	322	436	365	584
280	315	323	420	366	572
281	331	324	421	367	572
282	331	325	421	368	544
283	318	326	477	369	567
284	330	327	442	370	591
285	335	328	451	371	595
286	337	329	422	372	+
287	358	330	414	373	copy of 554
288	360	331	466	374	573
289	360	332	443	375	592
290	362	333	452	376	543
291	356	334	452	377	547
292	340	335	493	378	574
293	339	336	507	379	574
294	353	337	507	380	579
295	353	338	494	381	593
296	356	339	508	382	593
297	343	340	517	383	593
298	342	341	523	384	593
299	342	342	525	385	593
300	342	343	521	386	593
301	352	344	531	387	596
302	346	345	531	388	596
303	405	346	531	389	587
304	444	347	533	390	336
305	406	348	533	391	+
306	402	349	533	392	619
307	423	350	503	393	631
308	439	351	509	394	631
309	439	352	518	395	632
310	433	353	524	396	609
311	408	354	524	397	615
312	418	355	524	398	618
313	418	356	526	399	614
314	474	357	526	400	617
315	462	358	526	401	608
316	448	359	206	402	620
317	448	360	571	403	624
318	434	361	571	404	633
319	419	362	571	405-427	+

## CONCORDANCE: RIC—MAC DOWALL

RIC	MAC DOWALL	RIC	MAC DOWALL	RIC	MAC DOWALL
1	1, 35	62	415	105	450
2-8	+	63	415	106	450
9	2, 36	64	96	107	450
10	3, 37	65	102	108	450
11-16	+	66	84	109	417
17	34	67	91	110	424
18	4, 38	68	444	111	98
19	5, 39	69	430	112	106
20	6	70	70	113	439
21	7, 40	71	76	114	432
22	8, 41	72	+	115	98
23	+	73	416, 423	116	106
24	9, 42	74	119, 128	117	87
25	10, 43	75	112	118	82
26	11, 44	76	104	119	+
27	12, 45	77	85	120	+
28	13, 46	77A	92	121	122
29	14, 47	78	85	122	107
30	15, 48	79	473	123	88
31	16, 49	79A	+	124	93
32	17	80	468	125	447
33	18, 50	81	438	126	433
34	19, 51	82	445	127	131
35	20	83	431	128	418, 425
36	21	84	+	129	123
37-40	+	85	+	130	100
41	23, 55	86	71	131	108
42	22, 54	86A	71	132	114
43	24, 56	87	77	133	89, 94
44	26	88	105	134	474
45	25, 57	88A	105	135	469
46	30, 62	89	+	136	440, 448
47	32, 65	90	120	137	434
48	+	91	120	138	75
49	+	92	129	139	132
50	27, 50	93	97	140	115
51	67	94	113	141	109
52	28, 60	95	105	142	133
53	31, 64	96	113	143	+
54	33, 66	97	113	144	79
55	+	98	105	145	78
56	68	99	97	146	74
57	+	100	+	147	134
58	29, 61	101	420	148	126
59	+	102	427	149	422, 429
60	69	103	482	150	101
61	118	104	464, 470	151	+

Concordance: RIC

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RIC	MAC DOWALL	RIC	MAC DOWALL	RIC	MAC DOWALL
152	111	201	231, 235	249	+
153	117	202	+	250	+
154	90	203	294, 297	251	+
155	95	204	+	252	622
156	466, 472	205	135	253	615, 618
157	443, 452	206	150	254	+
158	+	207	421, 428	255	+
159	284	208	145	256	+
160	144	209	216, 220	257	621, 624
161	140	210	141	258	+
162	214	211	137	259	625
163	+	212	160, 163	260	614, 617
164	+	213	477	261	+
165	159	214	477, 483	262	608
166	157	215	465, 471	263	620
167	171	216	442, 451	264	+
168	+	217	+	265	+
169	283	218	151	266	+
170	136	219	138	267	335
171	153	220	161, 164	268	330
172	148	221	155	269	+
173	419, 426	222	147, 152	270	331
174	40, 277	223	+	271	318
175	+	224	225, 227	272	633
176	573, 578	225	211	273	+
177	215, 218	226	221	274	203
178	545	227	233, 237	275	+
179	139	228	239	276	493
180	143	229	+	277	504, 507
181	213	230	+	278	203, 207
182	162, 165	231	+	279	197
183	599	232	+	280	+
184	481	233	168	281	180
185	592	234	240	282	184
186	+	234A	+	283	+
187	441, 449	235	+	284	+
188	436	236	+	285	515, 517
189	+	237	+	286	523, 525
190	+	238	169	287	519, 521
191	289	239	+	288	+
192	222	240	+	289	212
193	232, 236	241	630	290	505, 508
194	295, 298	242	626, 628	291	494
195	+	243	+	292	204
196	300	244	329	293	499
197	238	245	+	294	192, 195
198	288, 291	246	+	295	198, 201
199	+	247	+	296	510
200	224, 226	248	+	297	190



RIC	MAC DOWALL	RIC	MAC DOWALL	RIC	MAC DOWALL
298	188	346	271	395	631
299	185	347	538	396	627, 629
300	177	348	+	397	609
301	516, 517	349	+	398	+
302	+	350	249	399	312
303	536	351	246, 247	400	310
304	524, 526	352	+	401	332
305	522	353	254	402	323
306	500, 503	354	+	403	322
307	495	355	+	404	308
308	205, 208	356	257	405	320
309	194, 196	357	+	406	316
310	199	358	+	407	307
311	191	359	+	408	306
312	206, 209	360	+	409	+
313	+	361	+	410	344
314	230	362	+	411	342
315	571, 576	363	+	412	346
316	598	364	543, 551	413	352
317	584, 588	365	570, 575	414	354, 360
318	285, 287, 290, 293	366	+	415	357
319	556, 560	367	+	416	343
320	564	368	275	417	+
321	574, 579	369	+	418	341
322	278	370	539	419	337
323	550	371	+	420	+
324	546	372	542	421	+
325	296, 299	373	272	422	+
326	+	374	243, 244	423	347
327	301	375	242	424	356
328	+	376	+	425	355
329	593, 596	377	327	426	+
330	587	378	325	427	+
331	581, 583	379	317	428	353, 359
332	550	380	334	429	+
333	175	381	311	430	+
334	+	382	+	431	348
335	256	383	+	432	+
336	255	384	+	433	+
337	252	385	313	434	336
338	572	386	+	435	345
339	+	387	+	436	+
340	+	388	616	437	+
341	+	389	619	438	+
342	591, 595	390	613	439	+
343	541	391	613	440	+
344	269	392	+	441	+
345	276	393	+	442	+
		394	+	443	+

VARIETIES EXCLUDED FROM THE CATALOGUE

*Categories excluded*

This catalogue of the western coinages of Nero excludes a number of varieties with Latin legends (sometimes included in the Roman coinages) which were in fact struck at various mints in the east, such as:

Antioch in Syria—see Wruck, *Die Syrische Provinzialprägung von Augustus bis Traian*

Caesarea in Cappadocia—see Sydenham, *The Coinage of Caesarea in Cappadocia*

Moesia—see MacDowall, "Two Roman Countermarks of A.D. 68," *NC* 1960, pp. 103-12

Corinth—see Earle Fox, "The Duoviri of Corinth," *JIAN* 1899, pp. 89-116

Other colonial mints—see Sydenham, *The Coinage of Nero*, pp. 137-69

The catalogue excludes varieties that can only be substantiated from forgeries—ancient or modern. Several entries in older catalogues quote coins that prove on inspection to be plated denarii or unofficial semisses that can hardly have been part of the regular production of the official mints. Unless the variety can also be substantiated from a genuine and regular coin, it has not been included.

The catalogue also excludes varieties that I have not been able to verify and vindicate from personal examination or from clear casts, photographs or rubbings. Although many new varieties have been discovered, it is surprising to find that quite a large number of the entries recorded in the *RIC* for Nero cannot be substantiated (varieties marked + in the concordance). In many cases it is possible to reexamine the coins from which the descriptions quoted in *RIC* from Sydenham, Cohen, Chedreau and de Sarcus, Gnechi and others were originally made. Some of the unusual coins noted by Sydenham are now in the British Museum, and several interesting coins from Sydenham's own collection are in Blackburn. Many of the varieties quoted by Cohen are from the Bibliothèque Nationale, Paris; the large deposit found at Mayenne, described by M. M. Chedreau and

de Sarcus is now in the Musée there. The collection of Gnechi is now in the Museo Nazionale delle Terme in Rome.

Such reexamination of the source material can be illuminating. Sometimes a variety has been misdescribed by the first author and his misdescription has been faithfully recorded in subsequent works; in other cases a correct description of the original author has been misquoted in a later work; and sometimes a correct description has been arbitrarily given the wrong metal, denomination or mint. As this catalogue on the western coinages of Nero is in many cases based on the same material as the entries quoted by *RIC*, it seems appropriate to list individually all the varieties in *RIC* which cannot be substantiated, with a comment on any error or misdescription that can be traced.

Among the varieties excluded are those coins in *BMC* and *RIC* that belong to other mints, or are unofficial products. For convenient reference, three of these categories—plated denarii, unofficial semisses and the product of the Mint of Moesia are summarized after the list of varieties in *BMC* and *RIC* excluded. It is only by eliminating such ghosts from the catalogues, and recognizing the nature of the unofficial issues, that the regular pattern of the official coinage can be reconstructed.

### *Varities in BMC excluded*

#### *BMC*

- 109 Plated hybrid denarius—see plated denarii (9)
- 110 Aureus of unusual style—possibly Mint of Corinth—see entry for *RIC* 48 of varieties in *RIC* excluded from catalogue.
- 133 The obverse legend has been reworked at the end. As Mattingly noted, it seems to have read originally NERO CLAVDIVS CAESAR AVG GER PM TRP IMP PP (not COS II PP) and to have been Mac Dowall no. 105
- 166 The obverse legend has been retooled, as Mattingly noted. It seems originally to have been IMP NERO CAESAR AVG GERM PM TRP XIII PP; and XIII has been reworked into IMP

*BMC*

- 211 Modern forgery—see entry for *RIC* 158 of varieties in *RIC* excluded from catalogue (PLATE XXIII, x)
- 239 This coin in copper (PLATE XXIII, w) which weighs 10.11 gm. seems to be an As. It has the obverse legend of that denomination at Rome in issue V, but the radiate head regularly used in later issues at Rome (issue IV onward) to distinguish the dupondius from the As. Its reverse type, Roma holding wreath and parazonium, is otherwise found on dupondii but not Asses. It does not fit into the pattern of the issues at Rome, and its style is somewhat suspect. It could be a trial striking, but it may well be false.
- 309 The obverse legend has been retooled—see entry for *RIC* 120 of varieties in *RIC* excluded from catalogue.
- 372 This is a hybrid which seems to be the result of a trial striking—see p. 106 above.
- 391 This is a barbarous coin, as Mattingly noted.
- 405-27 Mint of Caesarea in Cappadocia

*Varieties in RIC excluded*

(the descriptions are those given or implied by *RIC*)

*RIC*

- |       |   |  |
|-------|---|--|
| 2-8   | } | Mint of Caesarea in Cappadocia   |
| 11-16 |   |  |
| 23    |   | Denarius COH 212 (P), but the coin with this legend in Paris is a plated denarius—see plated denarii (1) |
| 37-40 |   | Mint of Caesarea in Cappadocia   |
| 48    |   | Aureus, Denarius BM  |

*Obv.*: IMP NERO CAESAR AVGVSTVS laur. r.

*Rev.*: IVPPITER LIBERATOR Jupiter seated l.

The coin in the BM is an aureus (BM 110, *BMCRE* I, pl. 40,15). There are two other examples—from Gnechi's collection (*RIN* 1910 pl. VII, 2.) and in the Hague—both aurei struck from the same obverse and reverse dies. The style is unusual and the coin seems non-Roman. Mattingly attributes it to Greece (? Corinth).

## RIC

- 49 Aureus, Denarius COH 124 (Vaillant, Beger)  
*Obv.*: IMP NERO CAESAR AVG PP laur. r.  
*Rev.*: IVPPITER LIBERATOR Jupiter seated l.  
 COH 124 describes an aureus only. He may possibly have misdescribed the obverse legend for *RIC* 48.
- 55 Denarius COH 319 (P) but the coin is a plated denarius—see plated denarii (8)
- 57 Denarius Sydenham 3 (Hall) but the coin is a plated denarius—see plated denarii (4)
- 59 Denarius De Quelen Coll.  
*Obv.*: NERO CAESAR AVGVSTVS PP laur. r.  
*Rev.*: VESTA circular temple  
 But the fourrée denarius with this unusual obverse in the De Quelen Coll. has the reverse type legionary eagle between two standards—see plated denarii (10).
- Aureus COH 125 (Caylus)  
*Obv.*: NERO CLAVDIVS CAES AVG laur. r.  
*Rev.*: LEIBERTAS Head of Liberty r.  
 An example of this gold coin in the Hague (7.0 gm.) (PLATE XXII, u) is struck from the same obverse die as an irregular silver coin in Copenhagen.  
*Obv.*: NERO CLAVDIVS CAES AVG laur. r.  
 (PLATE XXII, v)  
*Rev.*: ROM ET AVG Altar of Lugdunum  
 The obverse portrait is clearly irregular—perhaps rather a modern than an ancient forgery (cf. *SM* 1965, pp. 90 ff.).
- 72 Sest. COH 7 (no authority)  
*Obv.*: C. PONT MAX TR POT laur. r. globe  
*Rev.*: (21) Adlocutio without SC  
 This seems to have been a worn specimen of MacDowall 437 which has SC
- 79a Sest. Boudin-Bourgey, Paris, 1913  
*Obv.*: C. P MAX TR P PP laur. l. aegis  
*Rev.*: (22) Annona SC  
 The cast in the BM from which this description seems to be derived has head laur. l. globe and is MacDowall 479.

*RIC*

- 84 Dup. Gneccchi Coll., now in Terme Museum, Rome  
(PLATE XXIII, 2)  
*Obv.*: C. P. MAX TR P PP laur. r. globe  
*Rev.*: (22) Annona SC  
This coin has an unconvincing crack, which does not seem to have been caused by ancient striking. The obverse legend and globe are only found on issues of Lugdunum, the portraiture, bust truncation and treatment of the globe are not characteristic of the developed style of the Lugdunum issues L-V and L-VI, to which the coin should belong. It is almost certainly a modern forgery.
- 85 Sest. Gneccchi Coll. (*RIN* 1905, p. 161 pl. VII, 1.)—now in Terme Museum, Rome.  
*Obv.*: A. CLAVD ... GER laur. r. aegis  
*Rev.*: (22) Annona without SC  
The reverse of this coin in the Terme has been tooled; there are disturbances in the exergue which make it difficult to be sure that it genuinely omits SC. The coin probably had the letters originally and so would be MacDowall 119.
- 89 Multiple Sest. Walters Coll. (*NC* 1915, p. 329f.)  
*Obv.*: A. CLAVDIVS ... GER laur. r.  
*Rev.*: (30) Ostia—seven ships AVGVSTI POR OST (101.29 gm.)  
The weight of this piece suggests it may have been equal to 4 sestertii. Its genuineness has been questioned, but whether genuine or not, it can hardly have been intended as part of the normal coinage.
- 100 Sest. Sydenham 15.  
*Obv.*: A. CLAVD ... GER laur. r. globe and aegis  
*Rev.*: (30) Ostia—eight ships PORT AVG, SC  
The coin described in Sydenham has aegis only—i.e. is MacDowall 120.
- 119 Sest. COH 71 (Autrefois M. Gonzalès)  
*Obv.*: A. CLAVD ... GERM laur. l.  
*Rev.*: (23) Congiarium l. CONG POP R, SC

## RIC

The legend described by Cohen seems to be incomplete, with the number of the Congiarium and DAT missing. It may possibly be a misdescription of MacDowall 82.

120

Sest. COH 77 (BM)

*Obv.*: C. PONT MAX TRPOT PP laur. r. globe

*Rev.*: (23) Congiarium l. CONG] DAT POPVLO II, SC  
BM 309 has this legend, but the reverse is worn and seems to have been tooled. The legend was probably originally the CONG T DAT POP normally found at Lugdunum, i.e. MacDowall 439.

143

Sest. COH 95 (P)

*Obv.*: A. CLAVD ... GERM laur. l.

*Rev.*: (27) Decursio Vex without SC

The coin in Paris has the obverse legend A. CLAVDIVS ... GERM laur. l., and the entry in Cohen seems to refer to this, as it has "même légende" as COH 94 which has CLAVDIVS or CLAVD, i.e. is MacDowall 78.

151

Sest. Fairbairn Coll.

*Obv.*: A. CLAVD ... GERM laur. l.

*Rev.*: (35) Arch SC

This is a variety one might well expect in issue III at Rome.

158

C. As Sydenham 12 (Carfrae)

*Obv.*: NERO CLAVDIVS CAESAR AVG GERMANIC laur. r.

*Rev.*: (35) Arch SC

Three examples of this coin are known: J. Hirsch 33, no. 1157; Glasgow and BM 211 (PLATE XXIII, x). All three are struck from the same obverse and reverse dies, and from the same obverse die as the struck forgery in Oxford of a silver coin with a copper core (PLATE XXIII, y).

*Obv.*: NERO CLAVDIVS CAESAR AVG GERMANIC laur. r.

*Rev.*: Veiled head of Pietas r.

They are all modern forgeries. But the BM coin has been struck over a genuine dupondius of VICTORIA AVGVSTI

## RIC

type with the mark of value. There are traces of VI, TI and II on the flan.

163 Sest. COH 136 (P)

*Obv.*: IMP NERO CLAVD CAESAR AVG GERM laur. r.

*Rev.*: (29) Janus TERRA door l. SC

Cohen's entry seems a partial description of a rather worn sestertius in Paris which continued PM TRP XIII PP, i.e. is MacDowall 171.

164 Sest. Sydenham 12 (BM)

*Obv.*: B. CLAVD ... GERM laur. r. aegis

*Rev.*: (29) Janus TERRA door l. SC

The coin seems to be BM 166, which is heavily tooled toward the end of the legend and probably had TRP XIII PP originally, i.e. is MacDowall 171.

168 Sest. Naples.

*Obv.*: NERO CLAVD CAES AVG IMP TR POT XI PP  
bust draped cuirassed r.

*Rev.*: (29) Janus TERRA door l. SC

The coin in Naples with this obverse has the reverse type of Janus TERRA door r. SC. Its obverse legend has been tooled from NERO CAESAR AVG IMP TR POT XI PPP, i.e. is MacDowall 136.

175 C. As COH 147

*Obv.*: A. CLAVD ... GER laur. r. globe

*Rev.*: (28) Janus TERRA door r. SC

Cohen's entry is merely "la même médaille" "M.B.," and the preceding entry COH 146 has these types and legends "quelquefois dessous un globe." The coin described by Cohen under 147 therefore probably had no globe, and was the variety described in RIC 174, i.e. MacDowall 280.

186 Sest. COH 155 (Rollin)

*Obv.*: C. P MAX TRIB P PP laur. r.

*Rev.*: (28) Janus TERRA door r. SC

From the obverse legend, this should be a Lugdunum sestertius, and have a globe. But as the globe is missing from the description, one wonders whether the legend



## RIC

itself is not misdescribed for C. P. MAX TR P PP laur. r. globe, i.e. is MacDowall 475.

189

Sest. Sydenham 41 (BM)

*Obv.*: B. CLAVD ... GERM ... TRP XII

*Rev.*: (28) Janus TERRA door r. SC

This seems to be BM 113, which in fact reads TRP XIII, i.e. is MacDowall 170.

190

C. As COH 163 (P)

*Obv.*: NERO CAESAR GER IMP laur. r.

*Rev.*: (42) Janus VBIQ door l. SC

Cohen also adds that SC is in exergue. The coin in Paris with this reverse type with SC in exergue, and the other examples I have noted in Cambridge, Munich, Vienna and Ostia have NERO CAESAR AVG GERM IMP laur. r.; this coin is MacDowall 289.

195

C. As COH 167 (Chedeau and de Sarcus)

*Obv.*: IMP NERO CAESAR AVG GERM laur. r. globe

*Rev.*: (42) Janus VBIQ door l. SC

This is the description in the publication of the find from Mayenne no. 114; but I found no such coin in the Mayenne museum. Most copper Asses in this find are of the Lugdunum mint and have the Lugdunum globe. It seems that the authors have mistakenly added the globe to their description of the common As of the Mint of Rome, MacDowall 295.

199

C. As COH 173 (no authority)

*Obv.*: A. CLAVD ... GER bare l.

*Rev.*: (41) Janus VBIQ door r. SC

Cohen gives this obverse with a number of coins of the Janus VBIQ door r. type. He seems to have misdescribed an As of the Janus TERRA door r. type, with an obverse globe, MacDowall 578.

202

Dup. (no authority)

*Obv.*: B. CLAVD ... GER laur. r.

*Rev.*: (41) Janus VBIQ door r. SC

Seems to be a misdescription (laureate for radiate) from a worn example of MacDowall 231.

*RIC*

204 C. As COH 176 (BM)

*Obv.*: IMP NERO CAESAR AVG GERMANIC laur. r.

*Rev.*: (41) Janus VBIQ door r. SC

No coin in the BM answers this description; but BM 233 has the same legend with Janus VBIQ door l. and Cohen's entry seems a misdescription for MacDowall 300.

217 Sest. COH 269

*Obv.*: C. PONTIF MAX TRIB POT PP laur. r. globe

*Rev.*: (31) ROMA vict. and paraz. SC

This is a variety one might well expect in Issue L-V.

223 Dup. Sydenham 34 (Sydenham Coll.) now in BM

*Obv.*: A. CLAVD ... GER rad. r.

*Rev.*: ROMA, SC. Roma seated l. holding wreath, her l. arm rests on shield placed on helmet.

The left side of the reverse field of the BM coin (Sydenham pl. II, fig. 28) has been reworked, and the present S, R (of ROMA) and the wreath have been tooled in. The wreath seems to have been inserted mistakenly for the victory which is found on the rare sestertii of this type, described in MacDowall 147 and 152. This dupondius is described by me as having the victory of MacDowall 217.

229 Sest. Sydenham 48 (Gnecchi Coll.)

*Obv.*: A. CLAVD ... GER laur. r. globe

*Rev.*: Roma seated l. holding spear, rests l. arm on shield ROMA, SC

The coin now in the Terme, formerly in the Gnecchi Collection, on which this entry seems to be based, has Nero's head laureate r. without a globe, and Roma holds not a spear but a victory. It is MacDowall 147.

230 Sest. Sydenham 49 (Brunet à Evreux)

*Obv.*: A. CLAVD ... GER laur. l.

*Rev.*: as 229 above.

In Paris there is a sestertius with this obverse legend and reverse type, with a globe on the obverse. A normal sestertius obverse of the Lugdunum mint has been inserted to replace the worn obverse of a coin of the type of

## RIC

MacDowall 158, and the fabrication is betrayed by the circular incision all around the outside of the obverse legend.

231 Dup. Sydenham 50 (Brunet à Evreux)

*Obv.*: A. CLAVD ... GER rad. l.

*Rev.*: as 229 above.

I have not been able to substantiate this variety. If it genuinely exists it would be a hybrid with a reverse of issue VI and an obverse of issue IV, but the description may be incomplete and derived from a worn coin.

232 Sest. COH 285 (P)

*Obv.*: A. CLAVD ... GER laur. r.

*Rev.*: (33) Roma shield l. SC

But COH 285 and the coin in Paris which it describes has the obverse legend B. CLAVD ... GERM ... TRP XIII, i.e. is MacDowall 168.

234A Dup. Sydenham 46 (Belfort)

*Obv.*: B. CLAVD ... GERM ... TRP XIII laur. r.

*Rev.*: (33) Roma shield l. SC

This coin is not described in the 1888 sale catalogue. It is probably a misdescription of a dupondius with a radiate head (MacDowall 240) or of a sestertius with a laureate head (MacDowall 168).

235 Sest. BM

*Obv.*: B. CLAVD ... GERM laur. r. or l.

*Rev.*: (34) Roma shield r. SC

The only BM coin with this reverse BM 119 (*BMCRE I* Pl. 41,4) has obverse legend B. CLAVD ... GERM ... TRP XIII laur. l., i.e. is MacDowall 174. The variety with TRP XIII laur. r. is MacDowall 169.

236 Dup. Messenger Coll.

*Obv.*: B. CLAVD ... GERM laur. r.

*Rev.*: (34) Roma shield r. SC

The Messenger coin with this reverse is illustrated in *BMCRE I* pl. 48,5 and has the obverse legend B. CLAVD ... GERM ... TRP XIII rad. r. and is MacDowall 241.

*RIC*

- 237 Sest. Berlin  
*Obv.*: B. CLAVD . . . GERM laur. r. aegis  
*Rev.*: (34) Roma shield r. SC  
 The Berlin coin with this reverse (cast in BM) has obverse legend B. CLAVD . . . GERM . . . TRP XIII and is MacDowall 169.
- 239 C. Sem. COH 272 (P). The coin is an unofficial copy—see *SM* 1965, pp. 90 ff.
- 240 C. Sem. Sydenham 52 (L)  
*Obv.*: NERO CAESAR AVG PONTIF bare r.  
*Rev.*: (48) Roma MAX TRIB POT PP SC in exergue  
 This seems to be a misdescription from a worn coin for the obverse legend IMP NERO CAESAR AVG PONTIF bare r. globe and is MacDowall 626.
- 243 C. Sem. Sydenham 55 (Belfort)  
*Obv.*: IMP NERO CAESAR AVG PONTIF bare r.  
*Rev.*: (48) Roma MAX TRIB POT IMP PP, SC  
 This may be a misdescription for the reverse legend MAX TRIB POT PP, SC of MacDowall 626.
- 245 Or. Sem. COH 189 (P)  
*Obv.*: NERO CAES AVG IMP laur. r.  
*Rev.*: (48) Roma PON MAX TRP IMP PP, SC  
 COH 189 and the coin in Paris which the entry describes have PON MA TRP IMP PP, SC, i.e. MacDowall 328.
- 246 Or. Sem. Sydenham 59  
*Obv.*: NERO CLAVD CAESAR AVG GER laur. r.  
*Rev.*: (48) Roma PON MAX TRP IMP PP, SC wreath and parazonium  
 Sydenham 59 has reverse legend PON MA TRP IMP PP, SC and this is the variety noted in MacDowall 315.
- 247 Or. Sem. Sydenham 60 (Belfort)  
*Obv.*: NERO CLAVD CAESAR AVG GER laur. r.  
*Rev.*: (48) Roma PON MAX TRP IMP PP, SC parazonium  
 Sydenham 60 is a Roma seated r. (not l.). It may possibly be one of the unofficial copies of semisses.

*RIC*

- 248 C. Sem. COH 190 (Chedeau and de Sarcus)  
*Obv.*: NERO CLAVD CAESAR AVG GERM bare r. globe  
*Rev.*: (48) Roma PON MAX TRP PP, SC  
 This is the description in the publication of the find from Mayenne no. 122, but I have not been able to confirm the reading.
- 249 C. Sem. Sydenham 62 (*RIN* 1913)  
*Obv.*: NERO CLAVDIVS CAESAR AVG GERMANIC laur. r.  
*Rev.*: Roma PON MAX TRP IMP PP, SC (victory and paraz.)  
 The coin in *RIN* 1913 has these legends but no SC on the reverse; and Roma holds a wreath. It is MacDowall 304.
- 250 C. Sem. Sydenham 63 (Walters)  
*Obv.*: NERO CLAVDIVS CAESAR AVG GERMANIC laur. r.  
*Rev.*: (48) Roma PON MAX TRP IMP PP, SC (wreath)  
 Sydenham 63 describes the reverse as without SC and this Walters coin is in fact described in MacDowall 304.
- 251 C. Sem. BM  
*Obv.*: NERO CLAVDIVS CAESAR AVG GERM bare r.  
*Rev.*: (48) Roma PON MAX TRP IMP PP, SC  
 The only BM coin with these legends is BM 260 (*BMCRE* I, pl. 45,4) which has a laureate head on the obverse, and no SC on the reverse. It is in fact described in MacDowall 305.
- 254 C. Sem. BM  
*Obv.*: NERO CLAVDIVS CAESAR AVG GERM bare l.  
*Rev.*: (48) Roma PONTIF MAX TRP IMP PP, SC  
 The only BM coin with this reverse legend and its head bare l. is BM 398 (*BMCRE* I, pl. 47,11) and this has the obverse legend NERO CLAVD CAESAR AVG GERM, i.e. is MacDowall 618.
- 255 C. Sem. Sydenham 68 (Belfort)  
*Obv.*: NERO CLAVDIVS CAESAR AVG GERM laur. r.  
*Rev.*: (48) Roma PONTIF MAX TRP IMP PP, SC (wreath and branch)

*RIC*

- Sydenham 68 has NERO CLAVD CAESAR AVG GERM, and seems to be a misdescription for the variety with head bare r. and l. globe in MacDowall 615 and 618.
- 256 C. Sem. Sydenham 69 (no authority)  
*Obv.*: NERO CLAVDIVS CAESAR AVG GERMA bare r. globe  
*Rev.*: (48) Roma PONTIF MAX TRP IMP PP, SC in exergue  
 Sydenham 69 has NERO CLAVD CAESAR AVG GERMA and is in fact MacDowall 612.
- 258 C. Sem. Sydenham 72 (no authority)  
*Obv.*: NERO CLAVD CAESAR AVG GERM bare l. globe  
*Rev.*: (48) Roma PONTIF MAX TRPOT PP, SC  
 This seems to be a misdescription of the PONTIF MAX TR POT IMP PP, SC of MacDowall 617.
- 261 C. Sem. Sydenham 77 (Sydenham Coll.)  
*Obv.*: NERO CLAVD CAESAR AVG GERMAN laur. l. globe  
*Rev.*: (48) Roma PONTIF MAX TRPOT IMP PP, SC  
 The coin from Sydenham's collection with these obverse and reverse legends is now in Blackburn. It has a bare head, and is MacDowall 610.
- 264 C. Sem. COH 238 (Chedeau and de Sarcus)  
*Obv.*: IMP NERO CAESAR AVG P MAX bare r.  
*Rev.*: (48) Roma PONTIF MAX TRPOT IMP PP, SC  
 This is the description in the publication of the find from Mayenne no. 123, but I have not been able to confirm the reading.
- 265 C. Sem. Sydenham 84 (Lawrence Coll.)  
*Obv.*: IMP NERO CAESAR AVG PONT bare r. globe  
*Rev.*: (48) Roma PONTIF MAX TR POT IMP PP, SC  
 I have not been able to verify this variety, which COH 239 also cites from M. Grosdemange.
- 266 C. Sem. COH 240 (Corbet)  
*Obv.*: IMP NERO CAESAR AVG PONTIF bare r. globe  
*Rev.*: (48) Roma PONTIF MAX TRPOT IMP PP, SC

## RIC

I have not been able to verify this variety.

269

Or. Sem. COH 331 (P)

*Obv.*: NERO CAESAR AVG IMP bare r.

*Rev.*: (48) Roma TR PON PP, SC, S

Both the coins in Paris with this reverse legend have the obverse NERO CAES AVG IMP laur. r. which is described in MacDowall 330.

273

C. As COH 353 (Rollin)

*Obv.*: NERO CLAVDIVS CAESAR AVG GERM PM TR  
P IMP PP bare r.

*Rev.*: (48) No legend, Roma seated l.

Is this laur. r.? and so the copper semis without SC of Issue described in MacDowall 303.

275

Or. Dup. COH 126 (P)

*Obv.*: A. CLAVD ... GER rad. r. aegis

*Rev.*: (36) Macellum MAC AVG, SC

One of the dupondii in Paris with these types and legends has traces of an aegis; but there is a disturbance in the field near the PP and N and there seems to have been some tooling of the obverse. Perhaps the aegis is due to this, and the coin is really MacDowall 203.

280

Dup. COH 358 (no authority)

*Obv.*: A. CLAVD ... GER laur. r.

*Rev.*: (36) No legend, Macellum

COH 358 has this variety with head rad. r., i.e. MacDowall 186.

283

Dup. Belfort

*Obv.*: A. CLAVDIVS ... GERM laur. r.

*Rev.*: (36) No legend, Macellum

I have not confirmed this variety, but it is quite a possible one for issue II at Rome.

284

Dup. COH 322 (Gréau)

*Obv.*: A. CLAVD ... GER rad. r.

*Rev.*: (37) Securitas SC with no mark of value.

The mark of value has perhaps been omitted in the description and so the coin is MacDowall 204.

*RIC*

- 288 Dup. COH 320 wrongly for COH 330 (Chedeau and de Sarcus)  
*Obv.*: C. PONT MAX TR POT PP laur. r.  
*Rev.*: (37) Securitas SC  
 This is the description in the publication of the find from Mayenne no. 155, but I have not been able to confirm the reading.
- 302 Dup. COH 337 (no authority)  
*Obv.*: NERO CAESAR AVG PMAX TRP PP laur. l.  
*Rev.*: (39) Victoria l. wk. SC  
 This seems to be a misdescription from a worn coin of the legend C. P MAX TRP PP laur. l. globe of MacDowall 526.
- 313 Dup. COH 350 (P)  
*Obv.*: B. CLAVDIVS ... GER rad. r.  
*Rev.*: (40) Victoria r. II, SC  
 COH 350 and the coin in Paris which it describes has the obverse legend A. CLAVDIVS ... GER i.e. with IMP as cognomen and not as praenomen and is MacDowall 200.
- 326 C. As COH 300 (no authority)  
*Obv.*: IMP NERO CAESAR AVG GERMANIC bare r. globe  
*Rev.*: (47) Victory SC  
 COH 300 has merely head bare r. (no mention of a globe) and is probably a mistaken description for the variety with head laur. r.; MacDowall 301.
- 328 C. As COH 301 (no authority)  
*Obv.*: IMP NERO CAESAR AVG GERMANICVS laur. r.  
*Rev.*: (47) Victory SC  
 This also seems a misdescription of MacDowall 301.
- 334 ? C. As Sydenham 45 (Gréau)  
*Obv.*: A. CLAVD ... GER laur. r.  
*Rev.*: ROMA, SC Victory l. with shield inscribed SPQR  
 This coin seems to be an unofficial copy, combining in one type features of two reverse types as some of the unofficial semisses (see below).



## RIC

- 339 C. As COH 101 (no authority)  
*Obv.*: A. CLAVD ... GER laur. r.  
*Rev.*: (46) Genius with SC, but no mark of value  
 COH 101 seems to be a description from which T has been omitted, i.e. the variety is orichalcum As. MacDowall 269.
- 340 C. As COH 101 (no authority)  
*Obv.*: A. CLAVDIVS ... GER bare r.  
*Rev.*: (46) Genius with SC, but no mark of value  
 COH 101 has head laur. r. and seems to omit T i.e. the variety is orichalcum As. MacDowall 266.
- 341 C. As Sydenham 5 (*RIN* 1913)  
*Obv.*: A. CLAVDIVS ... GERM bare l.  
*Rev.*: (46) Genius with SC, but no mark of value  
 The coin in *RIN* 1913 has no SC and is MacDowall 251.
- 348 Or. As COH 106 (P)  
*Obv.*: D. CLAVD ... GERMANIC laur. r.  
*Rev.*: (46) Genius with SC and T  
 COH 106 and the coin in Paris which it describes have the head laur. l., i.e. is MacDowall 540.
- 349 C. As COH 196 (P)  
*Obv.*: D. CLAVDIVS ... GERMA laur. l.  
*Rev.*: (44) Apollo TRP without SC  
 The coin in Paris which Cohen describes seems to have a bare (not laureate) head, as does the coin with these legends in the BM—BM 236 (*BMCRE* I pl. 44,8). The variety is therefore MacDowall 250.
- 352 Or. As COH 199 (no authority)  
*Obv.*: D. CLAVD ... GERMANI rad. r.  
*Rev.*: (44) Apollo TRP without SC  
 This may be a worn or badly described example of the variety with the legends SC and T, i.e. MacDowall 275.
- 354 Or. As COH 241 (P)  
*Obv.*: D. CLAVD ... GERMANIC rad. r.  
*Rev.*: (44) Apollo TRP without SC

RIC

But COH 241 and the coin in Paris it describes have PONTIF MAX TR POT (not TRP) IMP PP, i.e. is MacDowall 260.

355 Or. As (no authority)

*Obv.*: D. CLAVDIVS ... GERMANIC rad. r.

*Rev.*: (44) Apollo TRPOT without SC

This may be a misdescription for the variety with SC and T of MacDowall 272.

357 C. As COH 243 (Chedeau and de Sarcus)

*Obv.*: A. CLAVD ... GER bare r. globe

*Rev.*: (44) Apollo TRPOT without SC

COH 243 and Mayenne no. 128, which it reports, have SC, and the variety is MacDowall 570.

358 Or. As COH 200 (no authority)

*Obv.*: D. CLAVD ... GERMANIC rad. r.

*Rev.*: (44) Apollo TRP SC

If this coin had T, it would be MacDowall 274.

359 Or. As COH 200 (no authority)

*Obv.*: D. CLAVDIVS ... GERMANIC rad. r.

*Rev.*: (44) Apollo TRP SC

This seems to be an incomplete description. Orichalcum asses either have both SC and T or no SC and no mark of value.

360 Or. As COH 201 (no authority)

*Obv.*: D. CLAVDIVS ... GERMANICVS rad. r.

*Rev.*: (44) Apollo TRP SC

If this coin lacked SC and had POT, it would be MacDowall 259.

Or. As COH 202 (Gréau)

*Obv.*: D. CLAVDIVS ... GERMANICVS laur. r.

*Rev.*: (44) Apollo TRP SC

If this coin lacked SC and had POT, it would be MacDowall 257.

361 C. As COH 247 (P)

*Obv.*: D. CLAVD ... GERMAN bare r. globe

*Rev.*: (44) Apollo TR POT SC

## RIC

COH 247 has "même légende" i.e. NERO CLAVD CAESAR AVG GERMANICVS "quelquefois avec GERMAN," and the coin in Paris has GERMANICVS, i.e. is MacDowall 543.

362 Or. As Sydenham 14 (St. Albans)

*Obv.*: D. CLAVD ... GERMAN laur. r. globe

*Rev.*: (44) Apollo TR POT SC

The coin in the Herts. County Museum, St. Albans on which this description is based has GERMANI (not GERMAN) and has the reverse mark of value T, i.e. is MacDowall 537.

363 C. As Sydenham 15 (no authority)

*Obv.*: D. CLAVD ... GERMANI laur. l.

*Rev.*: (44) Apollo TR POT SC

This seems to be a misdescription of the orichalcum As with GERMANIC (not GERMANI) and the reverse mark of value T, i.e. MacDowall 539.

366 Or. As Sydenham 21 (Gnecchi Coll., *RIN* 1910, p. 450 no. 4.)

*Obv.*: A. CLAVDIVS ... GERMANIC laur. r.

*Rev.*: (44) Apollo TR POTEST SC

But the coin from the Gnecchi Collection, now in the Terme, has the reverse mark of value T and is MacDowall 262.

367 Or. As COH 191 (P)

*Obv.*: D. CLAVDIVS ... GERMANIC rad. r.

*Rev.*: (44) Apollo PONTIF M TRPOT IMP PP, SC

There is no coin with these legends in Paris, but there are two examples with this obverse legend rad. r. and the reverse PONTIF MAX TRPOT IMP PP. SC, i.e. MacDowall 272.

369 Or. As COH 249 (P)

*Obv.*: D. CLAVD ... GERMAN bare l.

*Rev.*: (44) Apollo TR POT SC

But COH 249 has GERMANICVS ("quelquefois GERMAN") and the coin in Paris which Cohen quotes has GERMANICVS bare l. globe and is a copper As, i.e. MacDowall 542.

*RIC*

- 371 Or. As Sydenham 26 (COH 249, P)  
*Obv.*: D. CLAVD ... GERMANICVS bare l.  
*Rev.*: (44) Apollo TR POT SC  
 The coin in Paris is a copper As, MacDowall 542.
- 376 C. Sem. COH 46 (P) is an unofficial copy—see *SM* 1965, pp. 90 ff.
- 382 Or. Sem. COH 49 (P)  
*Obv.*: NERO CLAV CAESAR AVG IMP TR POT PP laur. r.  
*Rev.*: (49) Table CER QVINQ ROM CO SC  
 There is no such coin in Paris, but the Paris semis on which the description in Cohen seems to be based, with the reverse lacking S as he describes it, has NERO CAESAR AVG IMP TR POT PP laur. r. and is MacDowall 311.
- 383 C. Sem. COH 50 (Dancoisne)  
*Obv.*: NERO CLAV CAESAR AVG GERM bare l.  
*Rev.*: (49) Table CER QVINQ ROM CO SC  
 I have not been able to verify this variety.
- 384 C. Sem. BM  
*Obv.*: IMP NERO CAESAR AVG PONT bare r. globe  
*Rev.*: (44) Table CER QVINQ ROM CO SC  
 There is no such example in the BM; the entry seems to misdescribe BM 393 (*BMCRE* I pl. 47,9) which has CER QVINQ ROMAE CON and is MacDowall 631.
- 386 Or. Sem. COH 52 (P)  
*Obv.*: NERO CLAV CAESAR AVG bare r.  
*Rev.*: (49) Table CER QVINQ ROM CON SC  
 The coin in Paris which Cohen seems to be describing has a laureate head and is MacDowall 604.
- 387 C. Sem. Webb Coll. This coin is an unofficial copy.
- 392 C. Sem. Sydenham 18 (Oxford University)  
*Obv.*: NERO CAESAR AVG GERMANICVS bare r. globe  
*Rev.*: (49) Table CER QVINQ ROM CON SC  
 Sydenham 18 and the Oxford coin it describes have NERO CLAVD CAESAR AVG GERMANICVS, i.e. is MacDowall 607.

## RIC

- 393 C. Sem. Sydenham 19 (BM)  
*Obv.*: IMP NERO CAESAR AVG PONT bare r.  
*Rev.*: (49) Table CER QVINQ ROM CON SC  
 There is no such example in the BM. The entry seems derived from BM 394 which has ROMAE CON, i.e. is MacDowall 631.
- 394 C. Sem. (BM) Unofficial copy with retrograde reverse legend.  
 398 Or. Sem. Sydenham 24 (Belfort)  
*Obv.*: NERO CLAVDIVS CAESAR AVG GERM IMP bare r.  
*Rev.*: (49) Table CERT QVINQ ROM CO SC, S  
 The coin seems to be a misdescription for the semis with the obverse legend NERO CLAVDIVS CAESAR AVG GERMA laur r., MacDowall 312.
- 409 C. Sem. COH 65 (P)  
*Obv.*: A. CLAVDIVS ... GERM laur. r.  
*Rev.*: (49) Table CERTAMEN QVINQ ROM CON without SC  
 The copper semis without SC in Paris from which the entry in Cohen is derived has CERTAMEN QVINQ ROM CO. Cohen's entry is a misdescription for MacDowall 306.
- 417 Or. Q. COH 111 (Elberling)  
*Obv.*: Column NERO CLAVD CAESAR AVG  
*Rev.*: (50) Branch GER PM TRP PP, SC  
 This seems a misdescription for the reverse legend GER PM TRP IMP PP, SC; MacDowall 341.
- 420 C. Q. COH 112 (Elberling)  
*Obv.*: Column NERO CLAVD CAESAR AVG  
*Rev.*: (50) Branch GER PONT MAX TRP IMP PP, SC  
 I have not been able to substantiate this variety.
- 421 C. Q. COH 113 (P)  
*Obv.*: Column NERO CLAVD CAESAR AVG  
*Rev.*: (50) Olive Branch GERM PM TRP IMP PP SC  
 There is no *copper* quadrans in Paris with these legends, but Cohen's description seems to come from an orichalcum quadrans with this obverse legend and the reverse GER

*RIC*

RM TRP for GER PM TRP—perhaps due to die engraver's error or a die flaw, i.e. MacDowall 341.

422 Or. Q. BM

*Obv.*: Column NERO CLA CAE AVG GERM

*Rev.*: (50) Branch PM TRP IMP PP, SC

The quadrans with these types and legends in the BM is in copper without SC—BM 293, i.e. MacDowall 339.

426 Or. Q. (no authority)

*Obv.*: Column NERO CLAV CAES AVG GER

*Rev.*: (50) Branch PM TRP IMP PP, SC

The *RIC* entry comments "obverse legend doubtful." It seems to be a misdescription for NERO CLAV CAE AVG GER or NERO CLA CAES AVG GER, i.e. MacDowall 350 or 355.

427 Or. Q. (no authority)

*Obv.*: Column NERO CLAV CAESAR AVG GER

*Rev.*: (50) Branch PM TRP IMP PP, SC

This seems a misdescription from a coin worn or with legend off flan.

429 Or. Q. BM

*Obv.*: Column NERO CLAVD CAE AVG GER

*Rev.*: (50) Branch PM TRP IMP PP, SC

The coin in the BM with these legends is BM 287 (*BMCRE* I, pl. 45,12) a quadrans in copper, MacDowall 358.

430 Or. Q. and C. Q. Sydenham 16 (L)

*Obv.*: Column NERO CLAVD CAES AVG GER

*Rev.*: (50) Branch PM TRP IMP PP, SC

I have not been able to substantiate this variety.

432 Or. Q. COH 186 (P)

*Obv.*: Column NERO CLAVDIVS CAES AVG GERM

*Rev.*: (50) Branch PM TRP IMP PP, SC

This seems to be based on a worn quadrans in Paris on which the legends are not clear.

433 Or. Q. COH 187 (P)

*Obv.*: Column NERO CLAVDIVS CAES AVG GERM

*Rev.*: (50) Branch PON M TRP IMP PP (no SC)

## RIC

The coin in Paris on which Cohen's entry seems based is a copper quadrans without SC, with the obverse legend NERO CLAVDIVS CAESAR AVG GERM, i.e. MacDowall 336.

436

C. Q. COH 188 (Gréau)

*Obv.*: Column NERO CLAVDIVS CAES AVG GERM

*Rev.*: (50) Branch PON MA TRP IMP, SC

This coin does not occur in the Gréau sale catalogue as Cohen stated.

437

Or. Q., C. Q. COH 183 (P) and 184 (Rollin)

*Obv.*: Owl NERO CLAV CAE AVG GERM

*Rev.*: Column PM TRP IMP PP, SC

The coin in Paris, and COH 183 which accurately describes it, have NERO CLAV CAE AVG GER and the coin is a copper quadrans, MacDowall 361. COH 184 has the same legend and is merely a die variant with the aegis to the left on the reverse.

438

C. Sem. COH 256 (P) Unofficial copy—see *SM* 1965, pp. 90 ff.

439–441

C. As Mint of Moesia—see *NC* 1960, pp. 103 ff.

442

Denarius BM.

*Obv.*: NERO CAESAR AVGVSTVS laur. r.

*Rev.*: COS ITER TRPOT Pax seated l.

This denarius in the BM with a reverse type of Vespasian is fourrée—see plated denarii (9).

443

C. As COH 359 (P)

*Obv.*: C. PMAX TRP PP laur. l. globe

*Rev.*: No legend, sailing vessel with rowers.

The reverse of the coin in Paris on which Cohen's entry seems based, is very battered with hardly any trace of a reverse type. It is certainly no good evidence for the completely new reverse type suggested by Cohen.

### *Plated Denarii*

The following varieties of denarii, which are hybrid coins that combine an obverse type of one issue with the reverse type of another, are not represented in hoards and prove on close inspection to be plated. Being known only from fourrée examples they must therefore be distinguished from the regular coinage (see Chapter 3 above).

No.	Obverse	Reverse	Coll.	R/C	COH
(1)	Head bare r.	Wreath TRP VI	BM, P	23	212
(2)	NERO CAESAR AVG IMP	PONTIF MAXIM Livia std. r.	Ox		
(3)	Head laur. r.	Iupiter Custos	BM	57	
(4)	NERO CAESAR	Vesta	BM		
(5)		Eagle and standards	P		
(6)	NERO CAESAR AVGVSTVS	Augustus Germanicus	BM, M		
(7)		Eagle and standards	BM, M		
(8)		Salus fd.	BM, Ox	55	319
(9)		COS ITER TR POT	BM	442	
(10)	NERO CAESAR AVGVSTVS PP	Eagle and standards	De Q	59	
(11)	IMP NERO CAESAR AVGVSTVS	Augustus Augusta	Si		
(12)		Vesta	C		
(13)		Eagle and standards	C		



### Unofficial Copper Semisses

The following varieties of copper semisses are known only from irregular coins, that can hardly have been official products of a regular mint (see my article "Nero's Altar of Lugdunum Type," *SM* 59 (1965), pp. 90-93).

No.	Obverse	Reverse	Coll.	RIC	COH
(1)	NERO CLAVD CAESAR AVG GRM Head bare r.	ROMA [SC] Roma seated l. holding victory (PLATE XXI, h) CER QVINC RO Table	P	239	272
(2)	NERO CLAVD CAESAR AVG Head bare r.	CER QVINC ROM CON SC Table	P	376	46
(3)	NERO CLAVD CAESAR AVG GER Head bare l., globe	CER QVINC ROM CON, SC Roma seated l. (PLATE XXI, g)	Webb	387	
(4)	NERO CLAVD CAESAR AVG GRM Head bare r.	CER QVINC ROMAE CON Table (retrograde)	BM		
(5)	NERO CLAVD CAESAR AVG GERM Head bare r. or l.	Altar of Lugdunum ROM ET AVG (PLATE XXI, e)	BM	394	
(6)	NERO CLAVD CAESAR AVG GERM Head bare l., globe		Nij. P.	438	256

### *Mint of Moesia*

The following copper asses with Latin legends should be distinguished from the western coinages of Nero. In "Two Roman Countermarks of A.D. 68," *NC* 1960, pp. 103-112, I attribute them to a mint in Moesia.

No.	Obverse	Reverse	Coll.	RIC	COH
(1)	NERO CLAVDIVS CAESAR AVG GERM PM TRP Head laur. r.	SC. Neptune stg. (PLATE XXI, i, j)	Ox. Wal.	441	
(2)	Head laur. l.	PROVIDENT, SC. Square altar (PLATE XXI, k, l)	ANS, Got, Trau, Goubastoff	440	255
(3)	Head laur. r.	SC. Eagle on globe (PLATE XXII, m)	Got, Sof, W, C, Her	439	

Several coins from this mint are countermarked  $\Gamma\Lambda\Delta\text{BA}$  as the sestertius (PLATE XXI, d) and the Asses (PLATE XXI, i, k).



## APPENDIX

### I. ANALYSES OF SOME SILVER COINS

<i>Mint of Rome, Denarii</i>		<i>R</i>	<i>CU</i>	<i>A</i>
1. Nero TRP VII (A.D. 60/61)	Mac Dowall 43	96.3	1.7	2.0
2. Nero TRP VIII (A.D. 61/62)	Mac Dowall 48	99.0	0.1	
3. Nero post-reform issue 1 (A.D. 64/66)	Mac Dowall 60	93	7	
4. Nero post-reform issue 3a (A.D. 68)	Mac Dowall 68	89	11	
<i>Mint of Antioch, Tetradrachms</i>				
5. Nero early pre-reform (c. A.D. 60)	Wruck 38	90	10	
6. Nero BIP (A.D. 63/64)	Wruck 47	76	24	
7. Vespasian	Wruck 75a	90	10	
8. Vespasian	Wruck 88	90	10	
<i>Mint of Caesarea, Drachms and Hemidrachms</i>				
9. Tiberius	Syd. 42	72	28	
10. Nero (Greek Legend) pre-reform	Syd. 83	67	33	
11. Nero (Latin legend) pre-reform	Syd. 77	85	15	
12. Nero (Latin legend) pre-reform	Syd. 81	69	31	
13. Nero yr. 11. (A.D. 64/65)	Syd. 88	67	33	
14. Vespasian	Syd. 94	60	40	

Coins 1-4 and 9-14 were analyzed by the Neutron Activation method, and coins 5-8 were analyzed on the X-Ray spectrometer. These analyses were carried out at the Research Laboratory for Archaeology and the History of Art, Oxford, and I am indebted to Dr. Hall, Mr. Ainsley and Miss Emeleus for providing these results.

We may compare the earlier analyses of Nero's post-reform denarii quoted by A. V. Rauch<sup>1</sup> as 94.3 percent silver, and by Akerman<sup>2</sup>

<sup>1</sup> *MittNumGesBerlin* 1857, p. 297.

<sup>2</sup> J. Y. Akerman, *A Descriptive Catalogue of Rare and Unedited Roman Coins*, 1 (London, 1834), p. xiii.

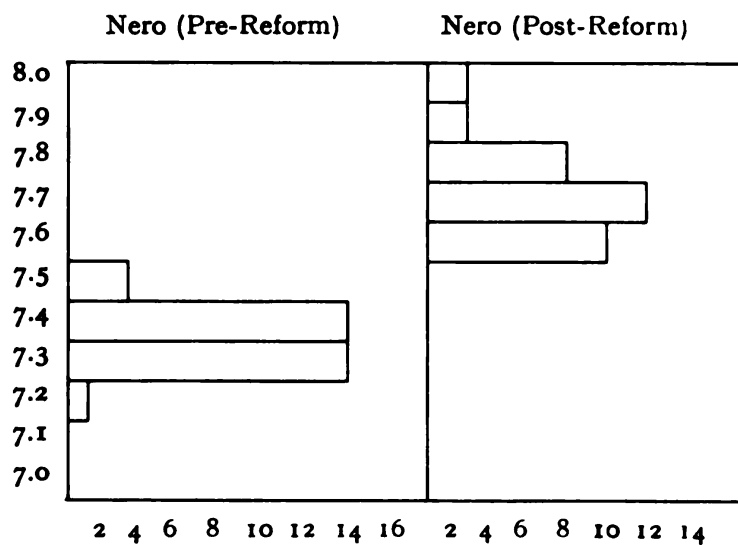
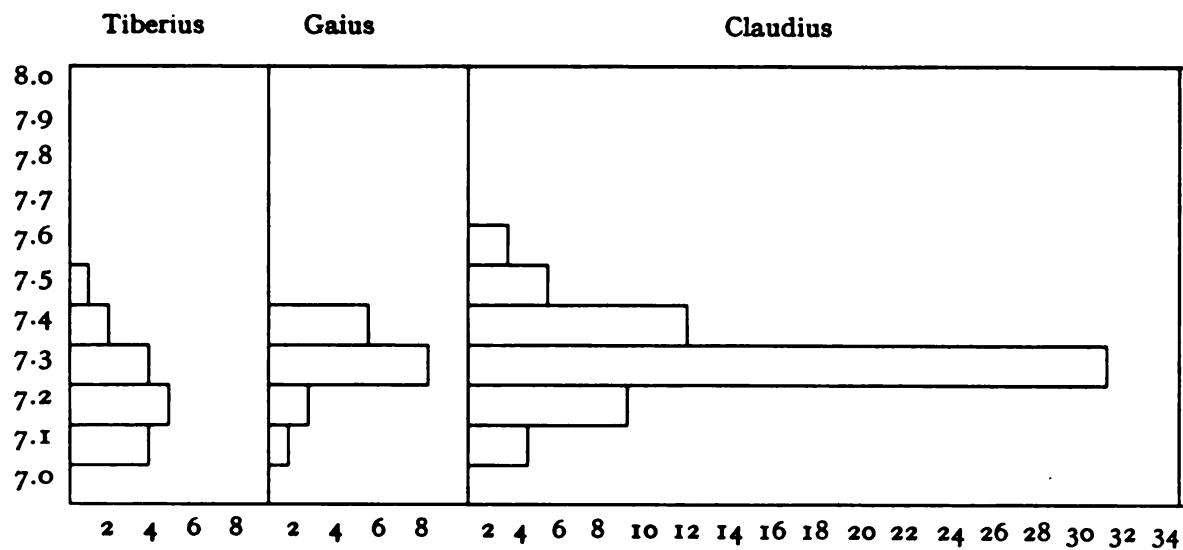
as 92.1 percent silver. Bolin<sup>3</sup> is rightly cautious about the results obtained by V. Ondrouch<sup>4</sup> from specific gravities of 86.7 percent and 91.6 percent silver.

## II. METROLOGICAL TABLES

1. Mint of Rome: Aurei
2. Mint of Rome: Denarii
3. Mint of Antioch: Tetradrachms
4. Mint of Caesarea: Drachms
5. Mint of Rome: Sestertii and Dupondii
6. Mint of Rome: Copper Asses
7. Mint of Rome: Orichalcum Asses
8. Mint of Rome: Orichalcum Quadrantes
9. Mint of Lugdunum: Sestertii and Dupondii

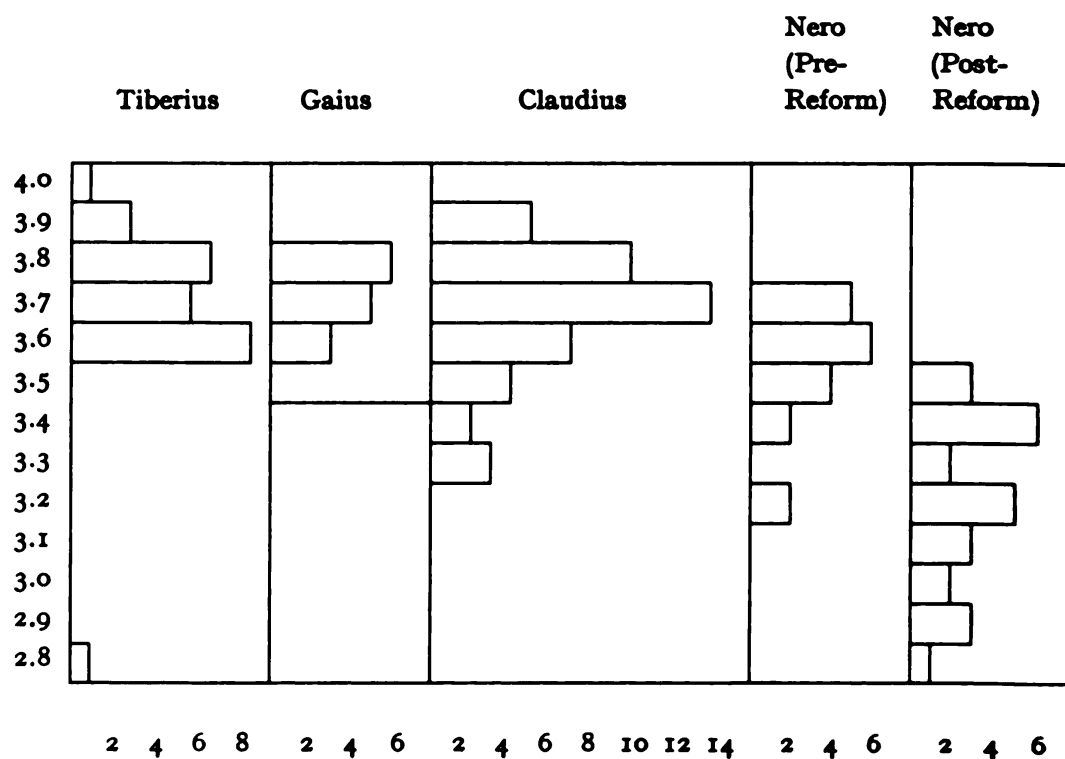
<sup>3</sup>S. Bolin, *State and Currency*, p. 197, n. 2.

V. Ondrouch, *Der römische Denarfund von Vyškovec*, 2 (Bratislava, 1934), p. 11.



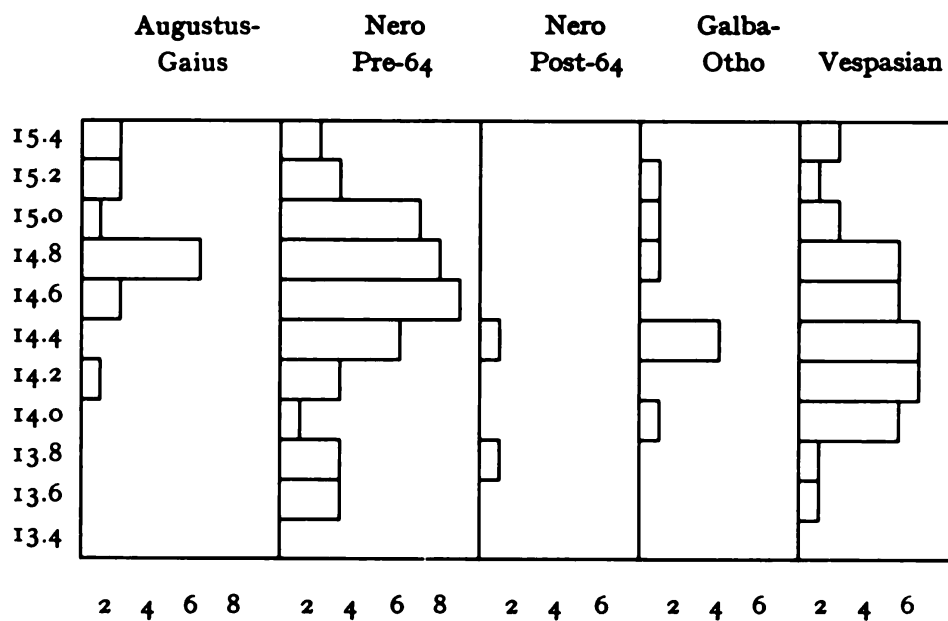
# 1. MINT OF ROME: AUREI

(Based on Aurei published in *BMCRE* I)



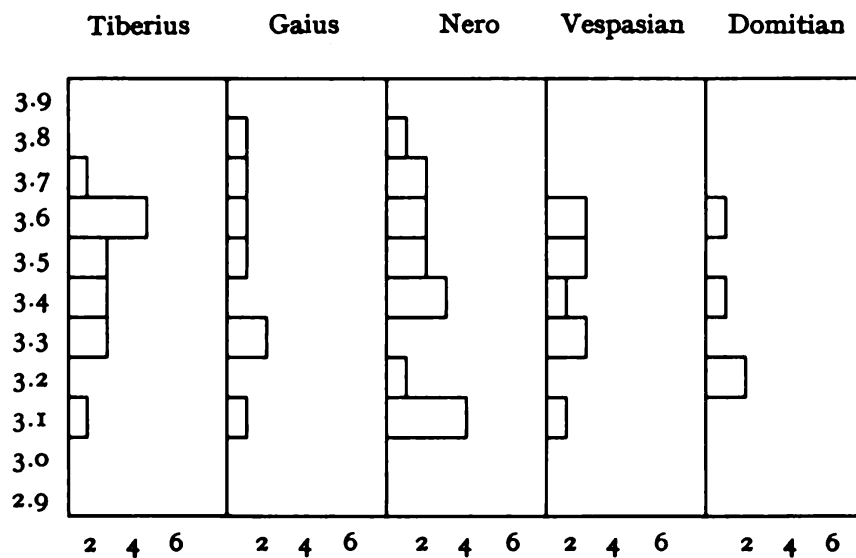
## 2. MINT OF ROME: DENARII

(Based on denarii published in *BMCRE I*)



### 3. MINT OF ANTIOCH: TETRADRACHMS

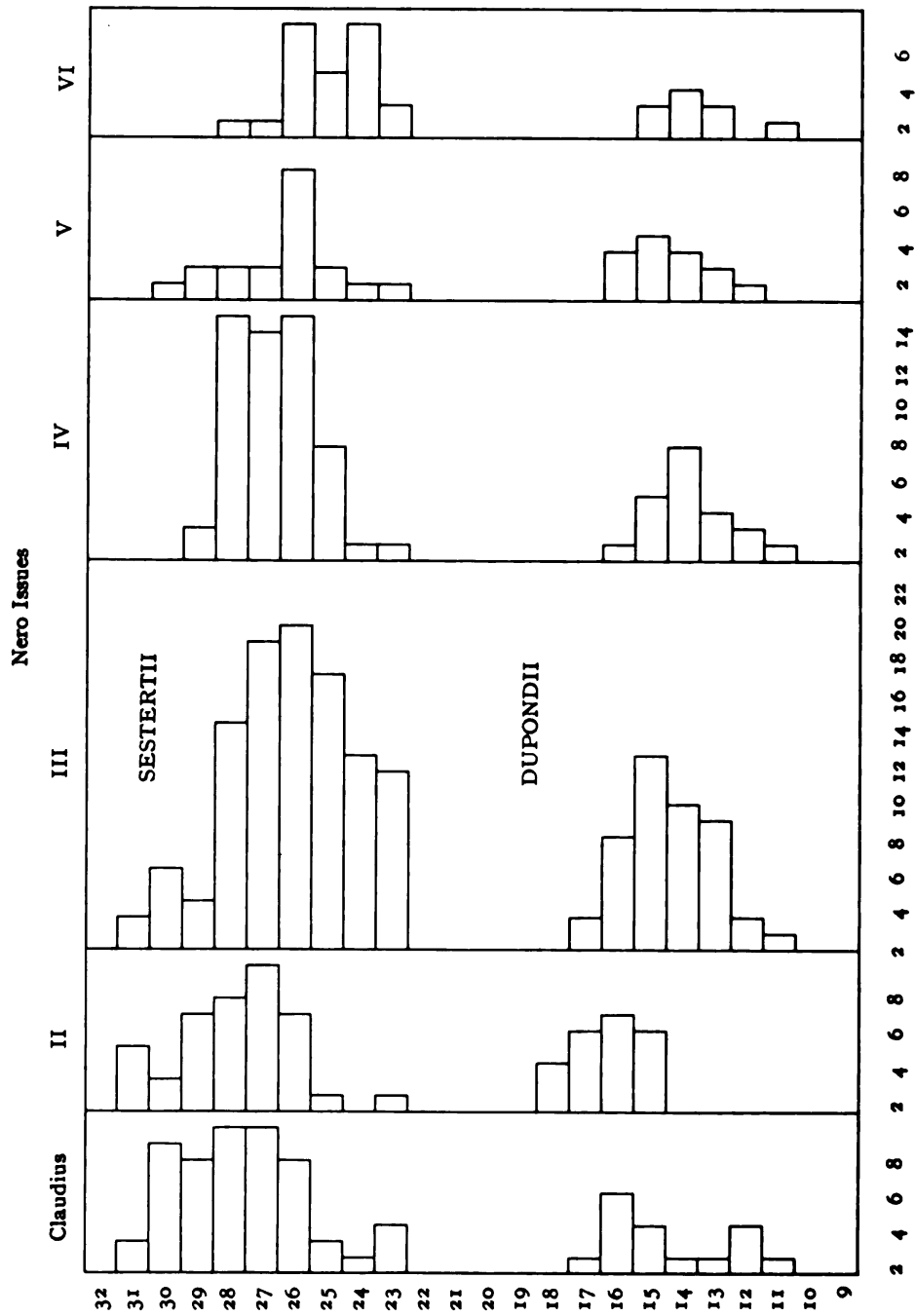
(Based on the weights of coins in the British Museum, Glasgow, Oxford and Milan coll., and the Eleutheropolis hoard)



### 4. MINT OF CAESAREA: DRACHMS

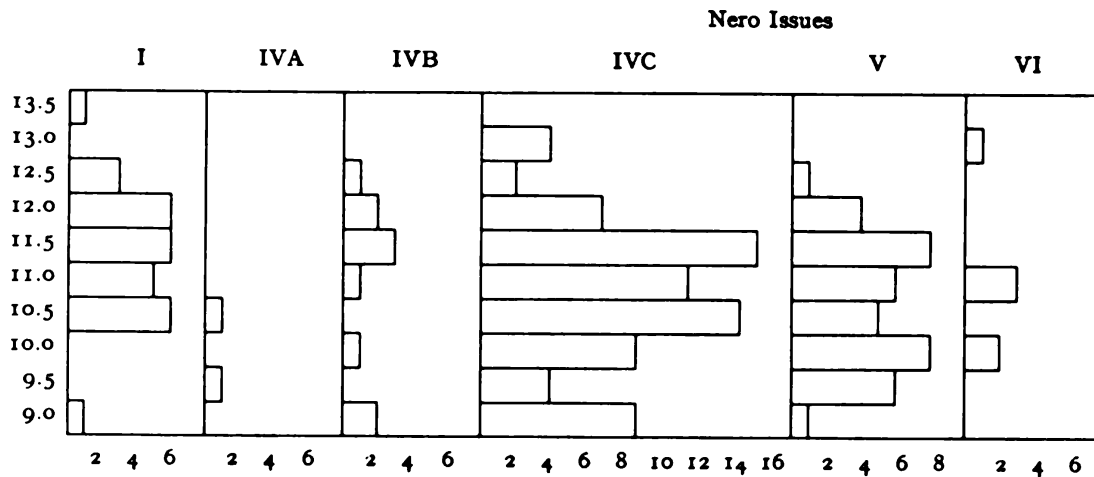
(Based on the weights of coins in the British Museum, Glasgow, Oxford, Milan and Sydenham coll.)





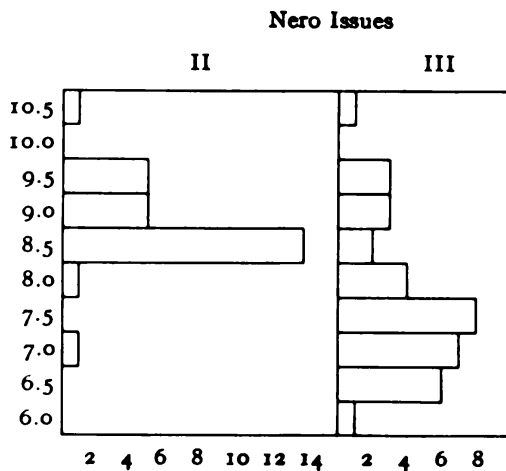
### 5. MINT OF ROME: SESTERTII AND DUPONDII

(Based on the weights of coins in *BMCRE I* [Claudius]; Chapter 4 above [Nero Issue II];  
 British Museum, Oxford and Glasgow coll. [Issues III-IV]; all examples noted by MacDowall [Issues V-VI])



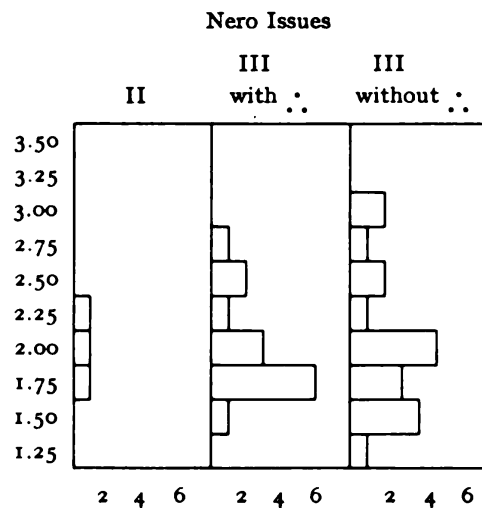
#### 6. MINT OF ROME: COPPER ASSES

(Based on the weights of coins in Chapter 4 above [Issue I];  
the British Museum, Oxford, Cambridge, Glasgow, Milan, Vatican and Vienna coll. [Issues IV-VI])



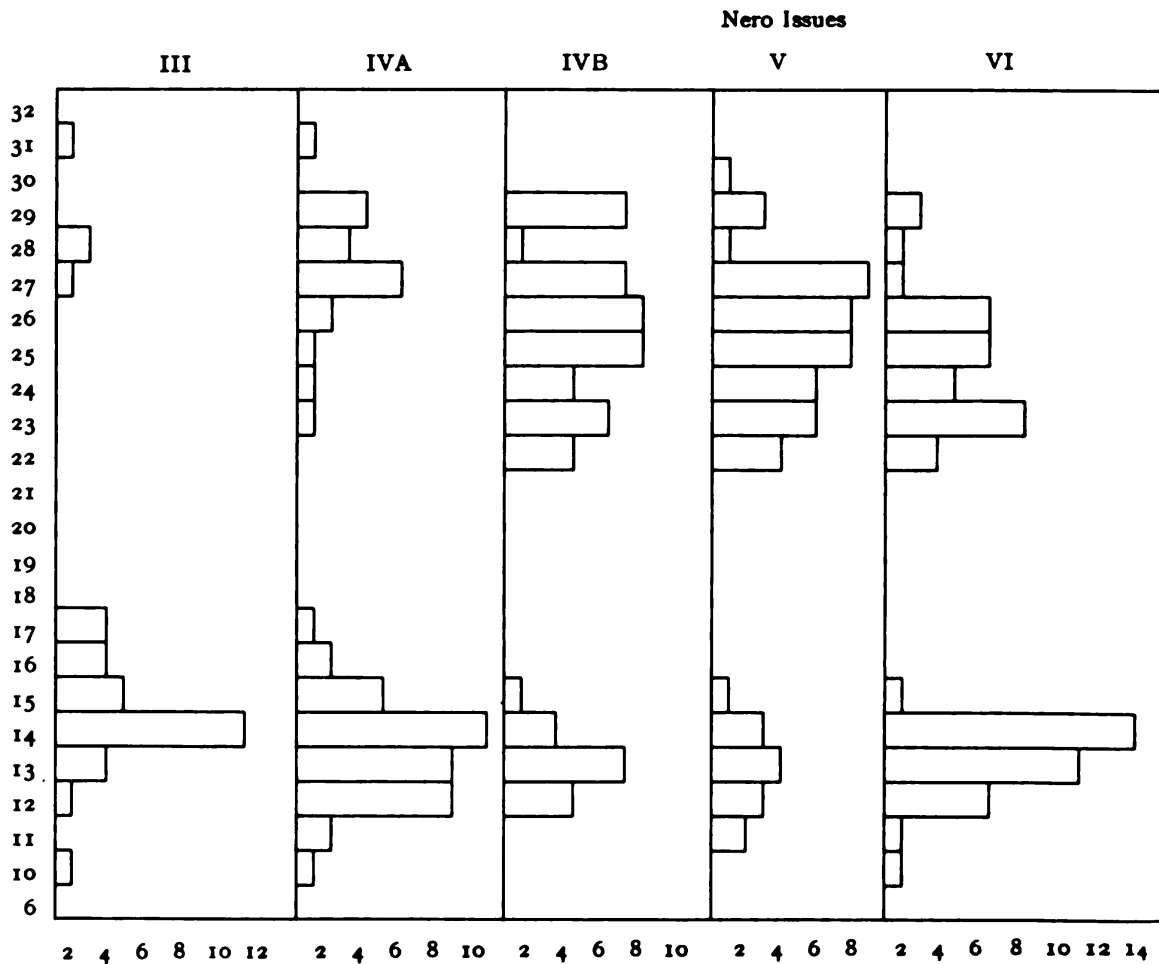
#### 7. MINT OF ROME: ORICHALCUM ASSES

(Based on the weights of coins quoted in  
Chapter 4 above [Issue II]; other orichalcum  
asses noted by MacDowall [Issue III])



#### 8. MINT OF ROME: ORICHALCUM QUADRANTES

(Based on the weights of coins quoted in  
Chapter 4 above [Issue II]; in the British  
Museum, Oxford, Cambridge, Milan,  
Madrid, Real Academia, Vatican and  
Vienna coll. [Issue III])



#### 9. MINT OF LUGDUNUM: SESTERTII AND DUPONDII

(Based on the weights of coins quoted in Chapter 6 above [Issue III]; in the British Museum, Oxford.

Cambridge, Milan, Vatican, Vienna, Paris, Blackburn,  
Manchester, the Hague, Hermitage and ANS [Issues IV-VI].

Dupondii of Issues V-VI are of the Securitas type only)

### Appendix III

#### III. EXAMPLES OF DIE LINKAGE AT ROME IN SESTERTIUS ISSUE III

*Obv. legend:* NERO CLAVD(IVS) CAESAR AVG GER(M) PM TRP IMP  
PP

Variations as noted:

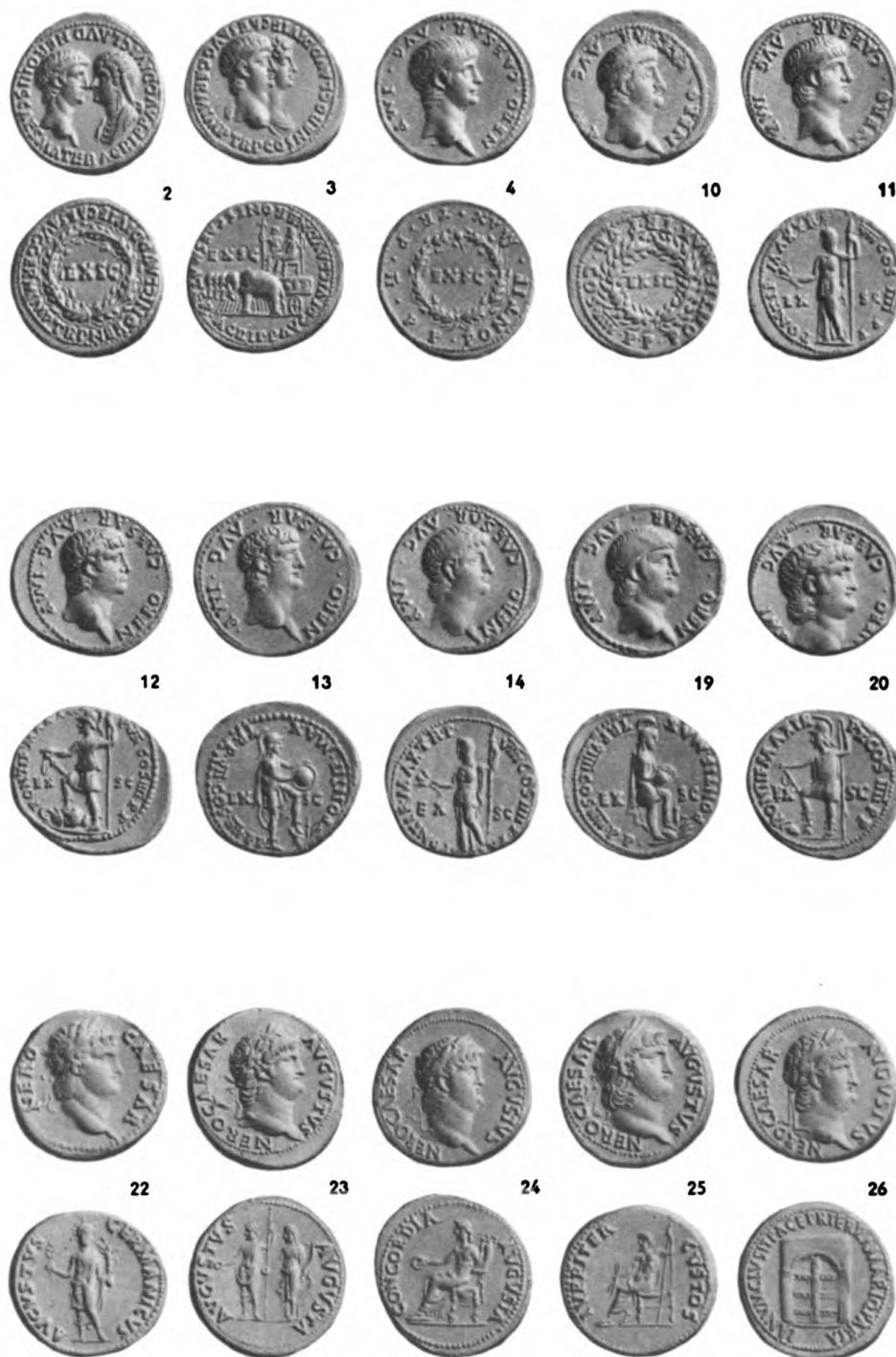
- (a) CLAVDIVS ... GERM laur. r. aegis
- (b) CLAVDIVS ... GERM laur. l.
- (c) CLAVD ... GERM laur. r. aegis
- (d) CLAVD ... GERM laur. l.
- (e) CLAVDIVS ... GER laur. r. aegis
- (f) CLAVDIVS ... GER laur. l.
- (g) CLAVD ... GER laur. r. aegis
- (h) CLAVD ... GER laur. l.

A 1 (c)	P 1	Adlocutio	Milan 1007 (rev. reworked)
	P 2	Ostia	Santamaria F.P.L. 15 (1934), 317
	P 3	Congiarium r.	Rome, Terme
	P 4	Congiarium l.	Bahrfeldt, 500
	P 5	Congiarium l.	Paris
			ANS
			Stockholm (rev. tooled)
			Basel Münzhandlung, 191
A 2 (a)	P 5	Congiarium l.	Prince W. I, 185
	P 6	Ostia	Oxford photo
A 3 (e)	P 6	Ostia	Oxford
	P 7	Arch	Oxford
A 4 (e)	P 6	Ostia	Glasgow
			Stockholm
			Ryan, 2285
	P 8	Ostia	BM 133
			Vienna
	P 9	Annona	Krausz 118 (= Bement, 641)
	P 10	Arch	Ars Classica, 1176
	P 11	Arch	BM 185
A 5 (b)	P 11	Arch	Vierordt, 889
	P 12	Decursio r.	BM 147
			Oxford
			Stiavelli, 405
A 6 (e)	P 10	Arch	Copenhagen
			Cambridge
			Hall, 1088
			Oxford photo
	P 30	Decursio r.	Oxford
A 7 (g)	P 30	Decursio r.	Rome, Terme

A 8 (e)	P 31	Annona	Naples
	P 13	Arch	Helbing 1926, 1442
A 9 (e)	P 13	Arch	BM 187
	P 14	Decursio l.	Ars Classica 13, 1175
A 10 (e)	P 14	Decursio l.	Santamaria F.P.L. 16 (1937), 317
	P 15	Congiarium l.	BM photo
			BM 137
			Paris
			Naples
			Sydenham, 31
			Hall, 1072
			Ars Classica 13, 1166
A 11 (f)	P 14	Decursio l.	BM 152
	P 32	Decursio l.	Vautier, 325
	P 16	Ostia	BM 135
			Paris
			Glasgow
			Oxford
	P 17	Ostia	Naples
	P 18	Ostia	Ars Classica 16, 1577
	P 19	Ostia	Paris
			Glasgow
A 12 (e)	P 16	Ostia	Paris
	P 20	Decursio l.	ANS
			Stockholm
A 13 (f)	P 14	Decursio l.	Bement, 650
	P 21	Decursio l.	Fitzwilliam, 34
	P 19	Ostia	Paris
A 14 (e)	P 19	Ostia	Rome, Terme
	P 22	Decursio r.	Vierordt Pt. 2, 335
	P 23	Decursio l.	BM 148
			Vatican
A 15 (e)	P 23	Decursio l.	ANS
	P 24	Decursio l.	Glasgow
A 16 (h)	P 24	Decursio l.	ANS
	P 23	Decursio l.	Paris
			Prince W. II, 584
A 17 (e)	P 21	Decursio l.	Cambridge
	P 25	Decursio l.	Signorelli Pt. 2, P. & P. Santamaria, June 4, 1952, no. 1144
	P 26	Arch	Naples
			Hoskier, 536
A 18 (e)	P 21	Decursio l.	Oxford photo
	P 27	Decursio l.	Oxford
	P 28	Janus TERRA door l.	J. Hirsch 12, 463
	P 29	Decursio l.	Oxford
			Cambridge
A 19 (e)	P 29	Decursio l.	Paris
			Glasgow

## PLATES





# THE WESTERN COINAGES OF NERO





THE WESTERN COINAGES OF NERO



THE WESTERN COINAGES OF NERO

IV



108



109



135



136



155



160



THE WESTERN COINAGES OF NERO



165



168



169



171



172

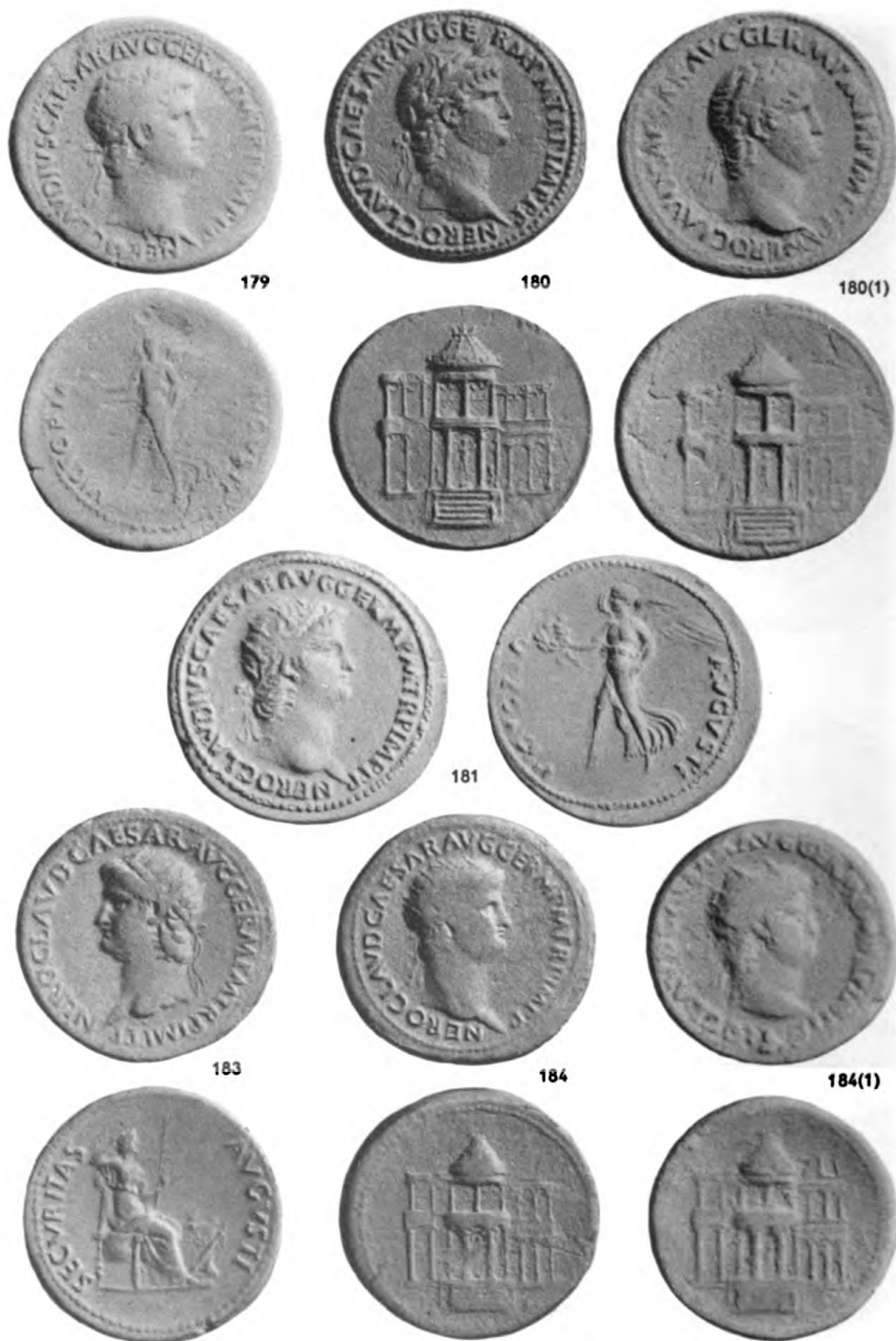


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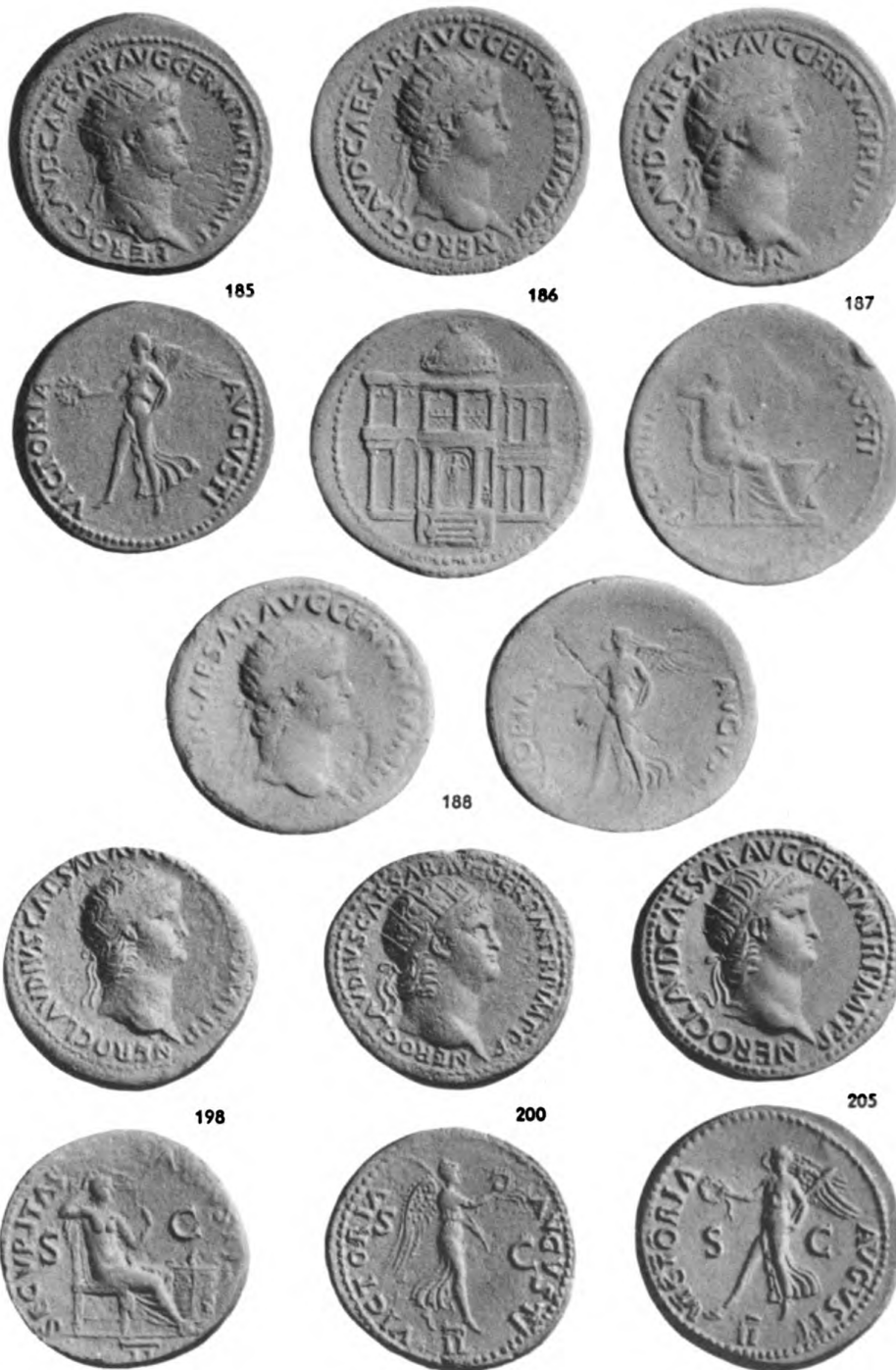


### THE WESTERN COINAGES OF NERO

# VI



## THE WESTERN COINAGES OF NERO



THE WESTERN COINAGES OF NERO



# VIII



207



218



220



225



226



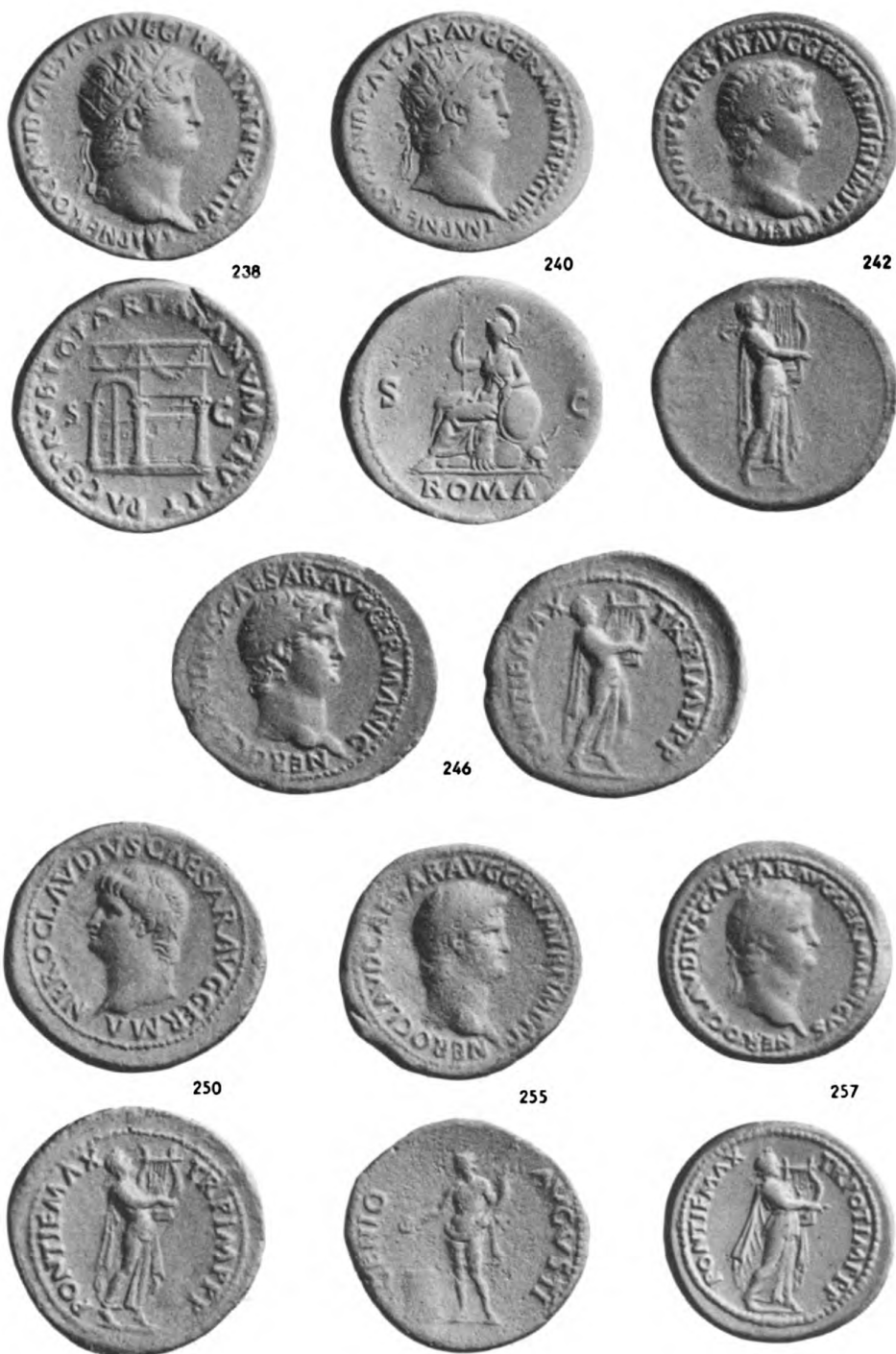
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237



## THE WESTERN COINAGES OF NERO



THE WESTERN COINAGES OF NERO



X



# THE WESTERN COINAGES OF NERO



283



288



290



294



296



300

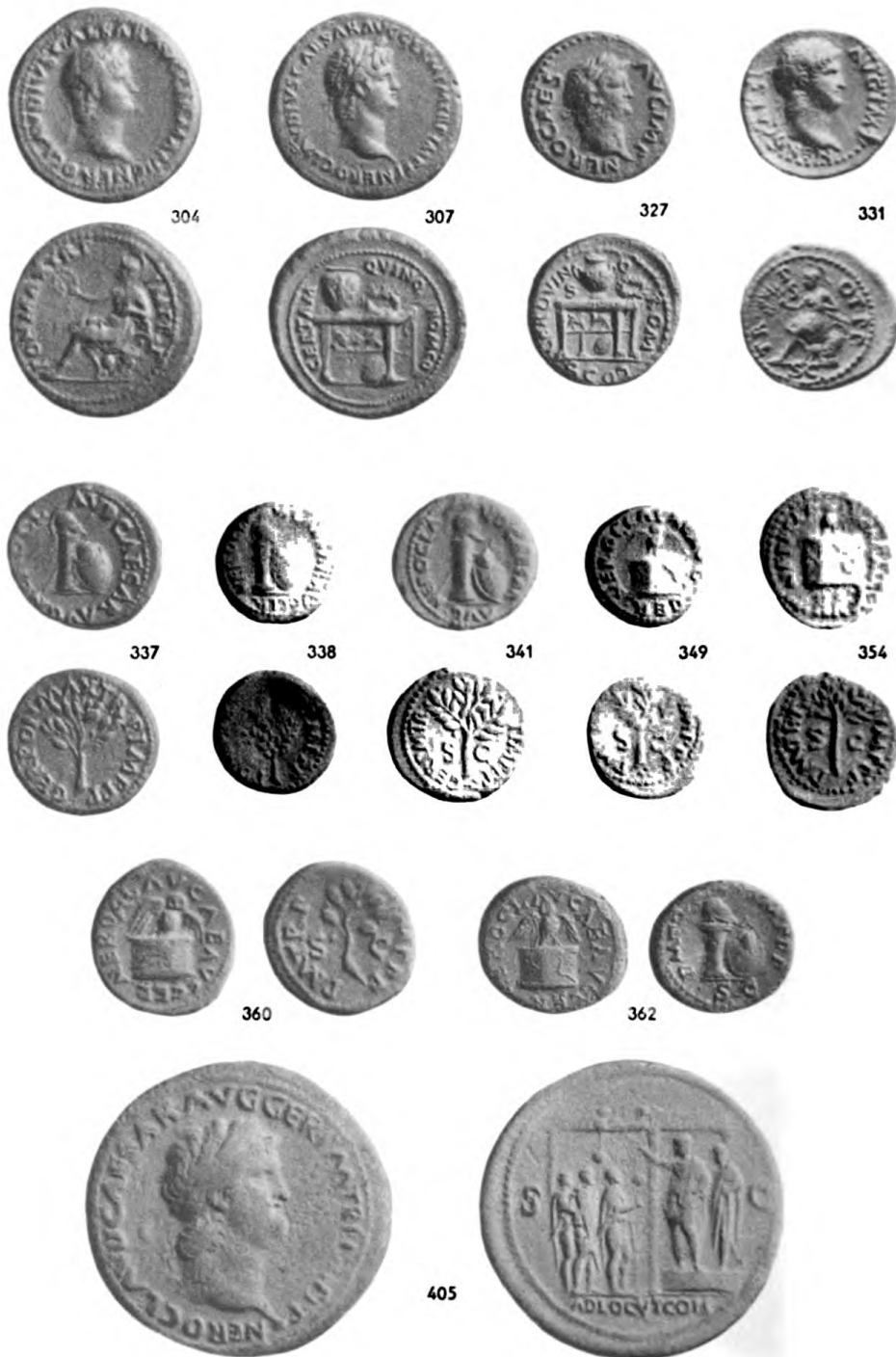


301



# THE WESTERN COINAGES OF NERO

XII



THE WESTERN COINAGES OF NERO



406



419



420



428



432



439



## THE WESTERN COINAGES OF NERO

XIV



442



452



474



490



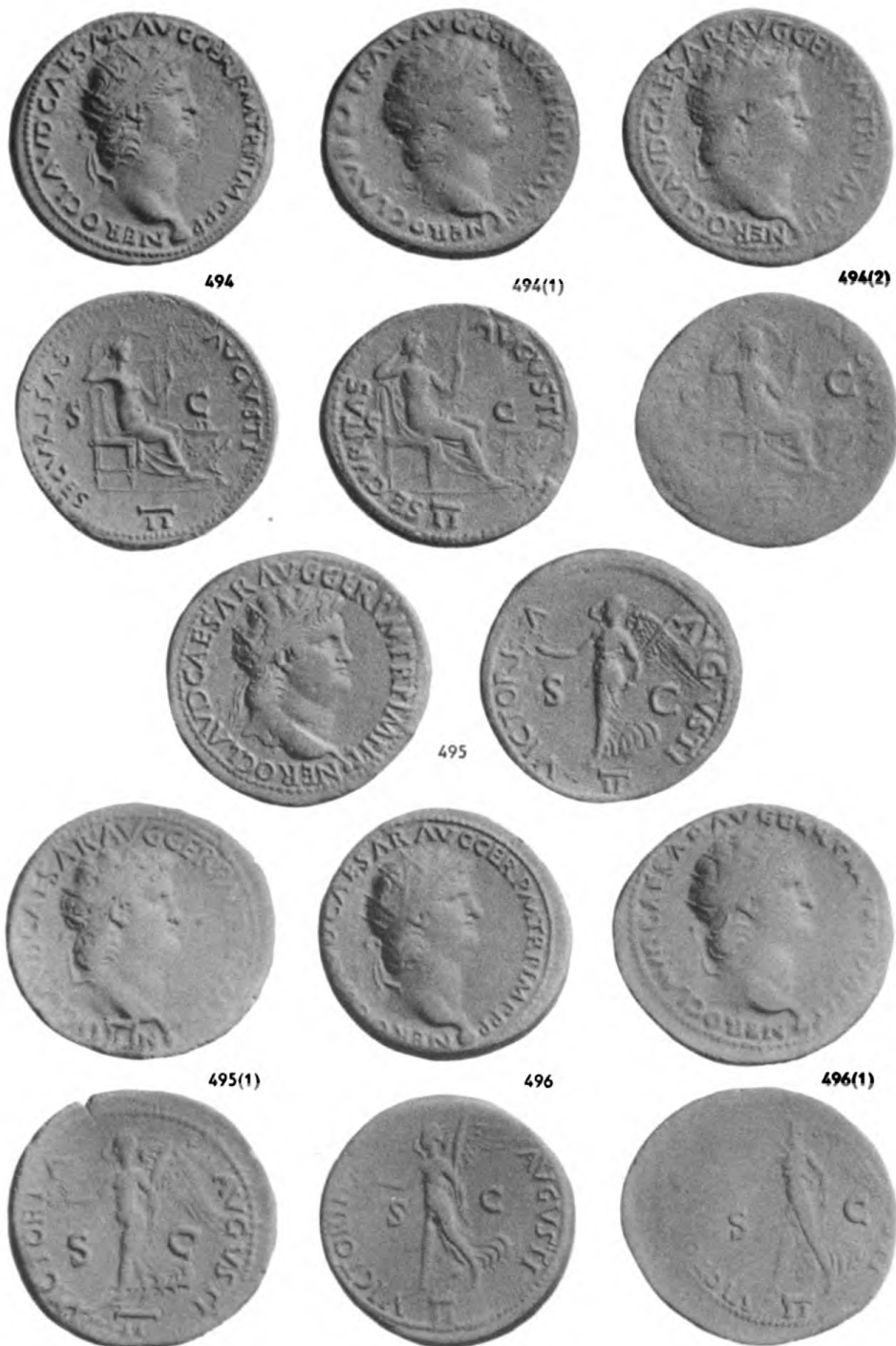
493



493(1)



THE WESTERN COINAGES OF NERO



THE WESTERN COINAGES OF NERO

XVI



492



494(3)



501



502



503



515



THE WESTERN COINAGES OF NERO





518



525



533



534



539



535



# THE WESTERN COINAGES OF NERO



# XVIII



540



538



541



542



544



547



561



## THE WESTERN COINAGES OF NERO



563



567



574



584



591



593

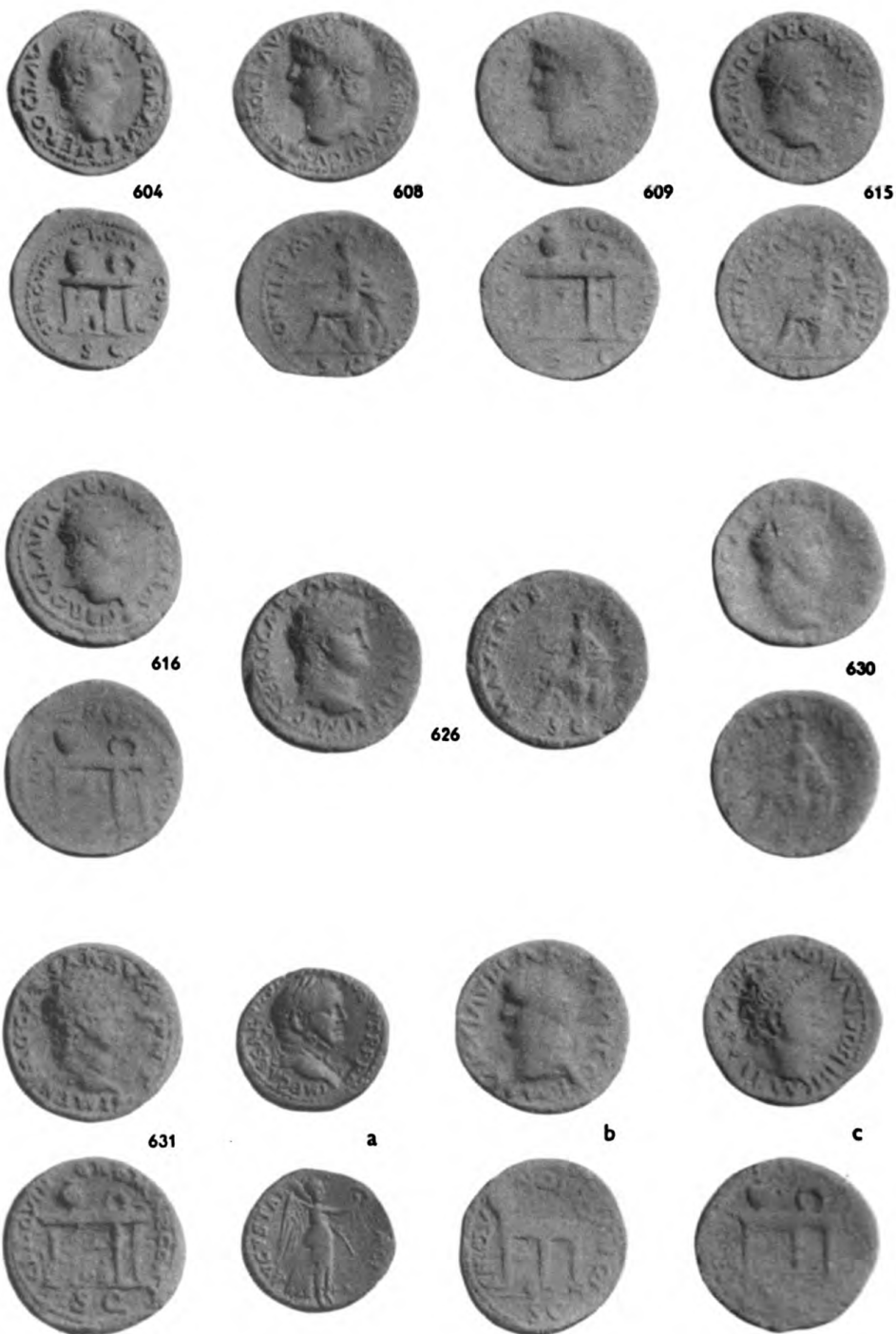


599

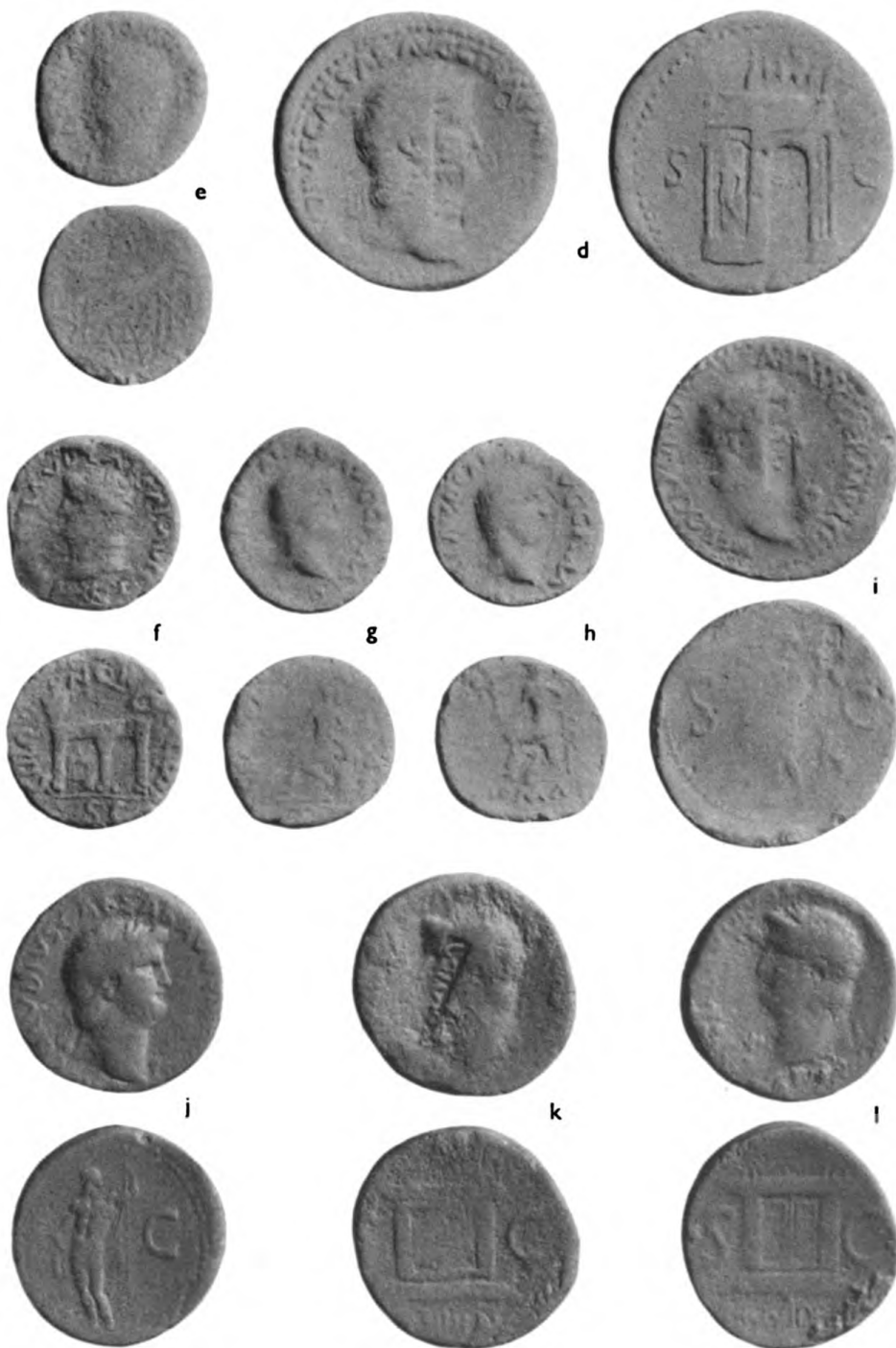


## THE WESTERN COINAGES OF NERO

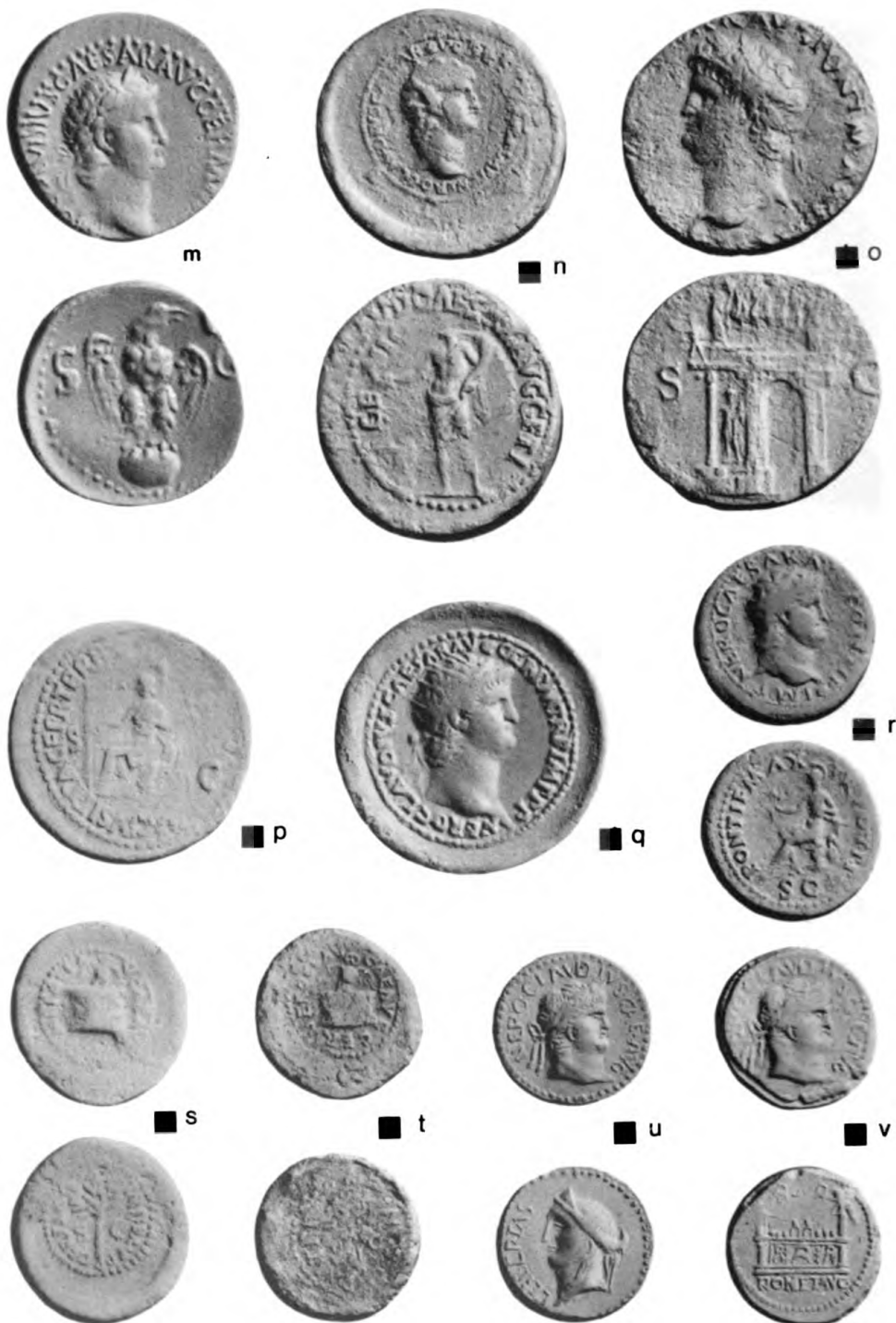
XX



# THE WESTERN COINAGES OF NERO



THE WESTERN COINAGES OF NERO



THE WESTERN COINAGES OF NERO



210



211



212



w



x



y



z



## THE WESTERN COINAGES OF NERO



Photograph courtesy of the Deutsches Archäologisches Institut, Rome

BUST OF NERO (Front view)





Photograph courtesy of the Deutsches Archäologisches Institut, Rome

**BUST OF NERO (Profile)**







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